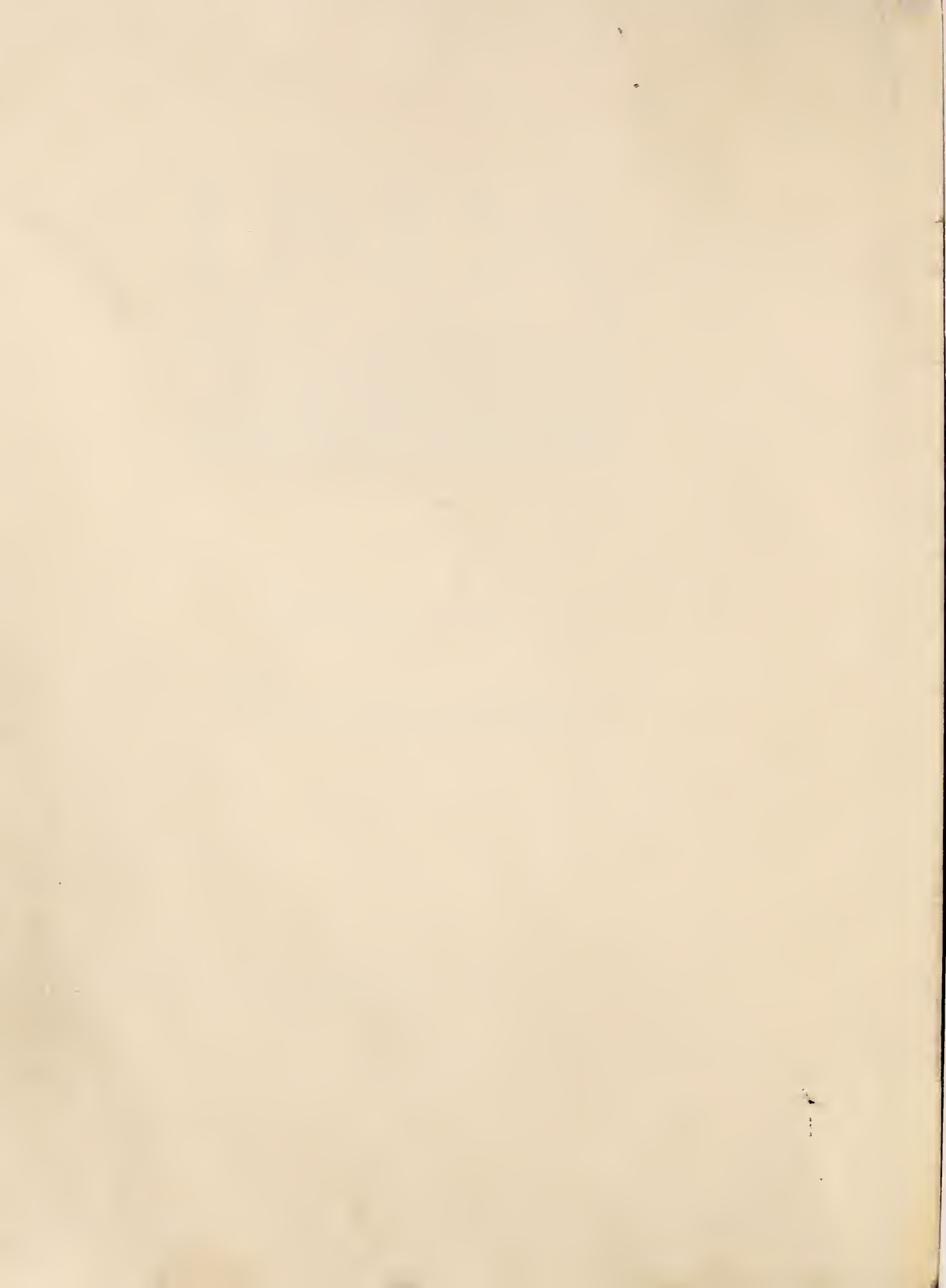


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TVS-226

October 1982

# Vegetable

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## OUTLOOK & SITUATION

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## Summary

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Total production of fresh and processed vegetables, tuber crops, and pulses is forecast to reach a record high during 1982. The production index of these items stood at 103 (1977=100) this year, compared with 98 in 1981 and the previous record of 101.5 in 1979. Increased harvested acreage in most categories, combined with generally good growing conditions, pushed up output. Fresh vegetable output will probably be the largest ever, while the outturn of processed vegetables, potatoes, and dry edible beans will also be among the largest ever.

In the case of fresh vegetables, the large crop has meant lower grower prices for most of 1982. Meanwhile, retail prices were fairly steady from late winter to this summer, when they fell. The larger tonnage of processed vegetables translated into increased packs, which will moderate any price rises for most items in the coming year. Meanwhile, because of large crops, prices for potatoes, sweetpotatoes, and dry beans will likely average lower during the coming marketing season. However, an economic recovery and, subsequently, increased consumer purchasing power could improve vegetable prices. Nevertheless, the smaller expected rise in marketing costs will help hold consumer prices down.

The 1982 fall potato crop is forecast at 307 million cwt, a 4-percent rise from last year and the largest harvest since 1978's record high. Favorable grower prices the past 2 years spurred an increase in acreage and caused the higher outturn. Output is higher in the Central and Western States, while poor growing conditions have reduced the Eastern States' crop.

The higher production and stable nature of potato use will lower the season-average grower price to \$4 to \$4.50 per cwt, from \$5.41 during 1981/82. Through mid-1983, retail prices of tablestock potatoes will probably be 10 to 20 percent below a year earlier. Prices for frozen potato products in the coming year are uncertain. Although frozen stocks on October 1 were about a tenth higher than last year's low holdings, some processors increased their list prices early that month. Net disappearance of frozen potatoes between July 1 and October 1 was up sharply from last year, indicating some strength in demand. However, with large supplies of potatoes available for processing, price rises should be moderate through next spring.

Per capita consumption of potatoes totaled 115 pounds (fresh-weight equivalent) in 1981, compared with 118

during 1980. A 3-1/2-pound rise in processed potato consumption (to 65-1/2 pounds) did not offset a 6-1/2-pound decline in tablestock use (to 49 pounds)—the second lowest on record.

For the major frozen vegetables, larger raw tonnage and consequently bigger packs will more than offset lower beginning stocks, leaving the largest supplies since 1979/80. October 1 stocks of all frozen vegetables reached a record-high 2.1 billion pounds. In contrast, canned supplies will approximate last year's level.

Processed vegetable prices will probably hold steady in the coming months. The enormous quantity of frozen vegetables on hand this fall may portend some price reductions in the months ahead. In particular, prices of sweet corn, carrots, green peas, and snap beans could come under pressure. Canned vegetable prices have been generally flat this year, and no dramatic changes are likely. However, snap beans and green peas are in fairly short supply, and their prices could rise. In addition, actual tomato tonnage fell short of processors' contract intentions. Therefore, there may be some shortages of tomato products later in the marketing year, boosting prices. Overall, the Consumer Price Index for processed vegetables will probably rise 3 to 7 percent during 1983, compared with gains of 6 and 12 percent the 2 previous years.

Through most of this year, grower prices for fresh vegetables have been below a year earlier. Although this summer's shipments of major vegetables about equaled a year ago, the index of grower prices averaged a fifth lower because of large supplies. The index will likely drop a tenth to a fifth during the fourth quarter and will average 120 to 125 (1977=100) for the year, compared with 135 in 1981.

Retail prices will likely increase seasonally during October-December, with the index for fresh vegetables (excluding potatoes) averaging from about slightly less to 10 percent higher than last fall's 248 (1967=100). For all of 1982, the index will average 5 to 8 percent above 1981's 263. Larger marketing margins apparently account for increased retail prices in the face of lower grower prices.

Sweetpotato production increased 14 percent from last year, to 14.6 million cwt, the largest crop since 1965. Because of the large crop, farmers are expected to receive an average price of \$8 to \$11 per cwt, compared with \$13.60 the past two seasons. Dry bean production, while down a fifth from last year's alltime high, is still the third largest outturn on record. Unless some export demand surfaces, grower prices will continue low during 1982/83. October's \$13.40 per cwt was the lowest monthly price since 1973.

## Vegetable Situation

### FRESH VEGETABLES

#### Recent Developments

##### Shipments About Even With 1981

Third-quarter shipments of six vegetables—cantaloups, celery, sweet corn, lettuce, onions, and tomatoes—showed remarkably little change from a year earlier. Of the six,

**Table 1—Quarterly Index of prices received by growers for fresh vegetables, 1972-1982<sup>1</sup>**

Year	(1977=100)				
	1st.	2nd.	3rd.	4th.	Annual
1972	68	64	62	67	65
1973	81	98	74	64	79
1974	73	83	73	81	77
1975	85	93	83	90	88
1976	93	80	86	92	88
1977	128	93	84	96	100
1978	107	129	94	94	106
1979	134	105	95	101	109
1980	100	116	104	119	110
1981	163	127	121	128	135
1982	160	117	99		<sup>2</sup> 120-125

<sup>1</sup>Excludes potatoes. <sup>2</sup>Unofficial ERS estimate.

SOURCE: Agricultural Prices, SRS, USDA.

**Table 2—Quarterly Index of retail prices for fresh vegetables, 1972-82<sup>1</sup>**

Year	(1967=100)				
	1st.	2nd.	3rd.	4th.	Annual
1972	137	135	128	133	133
1973	151	167	151	137	152
1974	150	160	152	151	153
1975	168	169	165	160	166
1976	170	168	165	179	170
1977	221	216	178	184	200
1978	212	247	209	204	218
1979	254	224	211	226	229
1980	220	250	231	253	239
1981	287	275	258	248	267
1982	341	302	250		<sup>2</sup> 280-290

<sup>1</sup>Excludes potatoes. <sup>2</sup>Unofficial ERS estimate.

SOURCE: ERS index derived from Consumer Price Index.

only onions and cantaloups showed any change at all from third-quarter 1981. Cantaloup shipments, at 5.6 million cwt, rose substantially from a year earlier. Shipments of the other five vegetables remained virtually the same as a year earlier.

The stagnation in fresh vegetable movement during a relatively abundant season can probably be explained by two factors. The most important is the slump in the Nation's economy, with consumers apparently reducing spending at most income levels. The second reason is

**Table 3—Fresh vegetable supplies, 1981 and 1982**

Supply	1981	1982
	<i>1,000 cwt</i>	
U.S. January-June production <sup>1</sup>	65,140	66,411
U.S. spring onion production	5,372	7,137
January-June imports	11,444	14,114
First-half supply	81,956	87,698
U.S. July-December production	84,282	<sup>2</sup> 84,251
U.S. summer onion production <sup>3</sup>	22,624	24,776
July-December imports	7,006	<sup>4</sup> 7,500
Second-half supply	113,912	116,527
Annual supply	195,868	204,225

<sup>1</sup>Includes broccoli, carrots, cauliflower, celery, sweet corn, lettuce, tomatoes, and honeydew melons. <sup>2</sup>Data are projected based on 1979-81 average yields and are not official estimates of the Crop Reporting Board. <sup>3</sup>Excludes California. <sup>4</sup>Unofficial ERS estimate.

somewhat related to the first. The recession appears to have encouraged more home vegetable gardening. The increased gardening and the accompanying good weather may have limited retail demand this summer.

## Prices Down, Reflecting Larger Outturn And Sluggish Movement

This summer, the retail price index for fresh vegetables (excluding potatoes) fell more than its usual seasonal rate (table 2). The third-quarter index (1967=100) stood at 250, compared with 302 in the second quarter and 258 for third-quarter 1981. The lower prices primarily reflected the moderately larger supplies, reduced marketing costs, and sluggish demand.

The index of farm prices for fresh-market vegetables during third-quarter 1982 was the lowest since 1979 (table 1). The index, at 99 (1977=100), reflected moderately larger supplies and the sluggish market for vegetables. The index should rise seasonally during the fourth quarter.

## Exports Decline, Imports Rise

The strong dollar and worldwide recession have significantly reduced exports of fresh vegetables compared with 1981, although they remain well above 1980. However,

**Table 4—Fresh vegetables: Representative prices (wholesale lots) at New York and Chicago for stock of generally good quality and condition (U.S. No. 1 when available), indicated periods 1981 and 1982**

Market and commodity	State of origin	Unit	Tuesday			
			1981		1982	
			Sept. 7	Oct. 6	Sept. 7	Oct. 5
Dollars						
Broccoli	California	14's crt.	10.50	10.75	9.50	9.50
Cabbage, domestic round type	New York	Various crates	3.75	4.50	4.25	—
Cantaloups	California	Jumbo crt. 36's	8.25	8.00	7.25	9.50
Carrots, topped washed	California	48 1-lb. film bag, ctn.	10.50	10.00	8.50	8.50
Cauliflower	Long Island	Crt. 12's	—	—	—	—
Celery, Pascal	New York	2-3 doz.	—	—	12.00	—
Celery, Pascal	California	2-3 doz.	11.00	10.00	13.00	9.50
Corn, sweet	New York	5 doz. crate	—	—	5.25	5.00
Cucumbers	Virginia	Bu. bskt.	—	—	8.00	—
Lettuce, Iceberg	California	2 doz. cnt.	12.00	8.00	6.75	9.25
Onions, yellow Spanish large	Idaho-Oregon	50 lb. sack	—	8.25	—	6.25
Onions, yellow globe medium	New York	50 lb. sack	—	—	4.50	3.75
Spinach, savory	New Jersey	Bu. bskt.	—	—	—	—
Chicago						
Beans, snap green round green	Illinois	Bu. hamper	10.00	11.00	8.00	9.50
Broccoli	California	14's crt.	10.00	9.50	8.00	9.25
Cabbage, domestic round type	Illinois	Various crates	3.75	3.25	4.00	3.50
Cantaloups	California	Jumbo crt., 36's	8.25	8.25	6.25	—
Cauliflower	California	Ctns., film wrpd., 12's	11.50	12.50	10.50	9.50
Celery, Pascal	California	2-4 doz.	11.50	11.00	10.50	10.00
Cucumbers	Illionis	Bu. bskt.	11.00	11.00	7.25	—
Green peppers	Illinois	Bu. bskt., large	8.00	6.00	5.75	—
Honeydews	California	Crts., 5-8's	6.35	6.25	6.50	6.00
Lettuce, Iceberg	California	2 doz. ctn.	11.00	8.00	8.00	9.00
Onions, yellow Spanish large	Idaho-California	50 lb. sack	7.50	8.50	6.75	6.00
Onions, yellow globe medium	Midwestern	50 lb. sack	7.25	6.25	5.75	4.75
Tomatoes, green, ripens and turning, med.-lge.	California	25 lb. ctn.	—	9.50	6.75	8.75

SOURCE: Weekly Summary of Terminal Market Prices, AMS, USDA.

**Table 5—Fresh vegetables: Retail price, marketing margin, and grower and packer return per unit, sold in Baltimore, indicated months, 1981 and 1982**

Commodity, month, and retail unit	Retail price <sup>1</sup>	Marketing margin		Grower and packer return (Fob shipping point prices) <sup>2, 3</sup>	
		Absolute	Percentage of retail price	Absolute	Percent of retail price
	Cents	Cents		Cents	
Carrots (lb.)					
July 1982	42.0	33.0	79	9.0	21
June 1982	43.0	34.0	79	9.0	21
July 1981	43.0	29.6	69	13.4	31
Celery (lb.)					
July 1982	44.2	32.4	73	11.9	27
June 1982	37.2	23.9	64	13.3	36
July 1981	41.9	26.3	63	15.6	37
Lettuce					
July 1982	70.0	55.4	79	14.6	21
June 1982	74.0	50.8	69	23.2	31
July 1981	64.0	41.0	64	23.0	36
Onions					
July 1982	36.0	28.6	79	7.4	21
June 1982	46.0	38.0	82	8.0	18
July 1981	44.0	27.3	62	16.7	38

<sup>1</sup>Retail prices from Maryland Department of Agriculture. <sup>2</sup>For quantity of product equivalent to retail unit sold to consumers; because of waste and spoilage during marketing, equivalent quantity exceeds retail unit. <sup>3</sup>Production areas: carrots-California, celery-California, lettuce-California, onions-Texas.

## Fresh Vegetables - Foreign Trade

Bil. pounds



Fresh vegetables includes melons. 1982 estimated.

USDA

Neg. ERS 317-82 (10)

there are some bright spots. Fresh onion exports were up sharply through August, with huge increases to and Japan.

Imports of asparagus, carrots, peppers, and onions from Canada and Mexico were up sharply from 1981. Fresh tomato imports increased moderately, with shipments coming from a variety of countries. Only imports of fresh cucumbers and eggplant fell from last season. Eggplant imports declined slightly from 1981, while cucumbers dropped sharply.

Canada retains its position as the leading buyer of U.S. fresh vegetables. In 1981, the United States exported slightly more than 1 million metric tons of fresh vegetables to Canada. This was 11 percent more than the previous year and represented a reversal of a 3-year down-

turn in exports to Canada. Although the United States supplies the greatest portion of its fresh vegetables, Canada also imports sizable quantities from Mexico during the winter and early spring. The seasonality of Mexican exports makes it the only effective competitor of the United States for the Canadian market. With the peso devaluation, it is likely that Mexico may enjoy an even greater competitive edge this winter.

## Outlook

### Fall-Quarter Acreage, Production Up

Current acreage estimates for seven major fresh-market vegetables show a moderate rise for the final

**Table 6—Fresh vegetables: Average f.o.b. shipping point prices, United States, September 15, 1982, with comparisons**

Commodity	1981		1982		
	August	September	July	August	September 1-15
	<i>Dollars per cwt</i>				
Carrots	12.90	12.70	9.95	10.50	10.60
Celery	10.70	11.40	10.00	9.79	11.30
Corn, sweet	10.70	11.60	11.90	10.60	10.20
Lettuce	12.50	11.40	11.10	7.40	7.30
Onions	15.40	11.50	11.60	13.50	9.54
Tomatoes	21.60	19.40	22.50	17.90	15.80

SOURCE: Agricultural Prices, SRS, USDA.

**Table 7—Vegetables and melons for fresh market: Commercial acreage and production of principal crops, major States, 1981 and 1982**

Seasonal group and crop	Area for harvest		Percent of 1981	Production <sup>1</sup>		Percent of 1981 <sup>4</sup>
	1981	1982		1981	1982	
	<i>Thousand acres</i>			<i>Million cwt</i>		
January-June	297.9	292.2	98	65.1	66.4	102
July-December						
Broccoli <sup>2</sup>	36.0	39.4	109	3.3	3.5	106
Carrots <sup>2</sup>	32.1	34.9	109	10.5	11.3	108
Cauliflower <sup>2</sup>	27.1	29.6	109	2.9	3.0	103
Celery <sup>2</sup>	16.7	17.6	105	8.7	9.0	103
Sweet corn	115.5	118.5	103	8.2	8.3	101
Lettuce	110.7	112.4	102	34.0	32.4	95
Tomatoes	64.3	65.6	102	13.9	13.3	96
Honeydew melons	15.6	19.2	123	2.7	3.5	130
Total 8 vegetables & melons <sup>3</sup>	418.0	437.2	105	84.3	84.3	100

<sup>1</sup>January-June production data are as published by the Crop Reporting Board. July-December 1981 data are estimated production reported by Crop Reporting Board. Data for 1982 are projected production for July-December 1982 based on 1979-81 average yields per acre and are not official estimates of the Crop Reporting Board. <sup>2</sup>Includes fresh market and processing. <sup>3</sup>May not add to total due to rounding. <sup>4</sup>Percentage figures listed are correct: Production data have been rounded.

SOURCE: Vegetables, SRS, USDA.

quarter of 1982. For fall, the combined area for broccoli, carrots, cauliflower, celery, sweet corn, lettuce, and tomatoes is placed at 147,600 acres, a 6-percent increase from 1981. Based on average yields for the past 3 years, production for July-December is projected at 80.7 million cwt, similar to the past 2 years (table 7).

Honeydew melons were planted extensively this fall, and the area for harvest jumped to 4,950 acres, a sharp increase from 1981. Based on average yields for the past 3 years, production for second-half 1982 is forecast at 3.52 million cwt, also up sharply from a year ago.

### Mexican Supply Situation Uncertain

The peso devaluation gives Mexico a potential advantage for enlarging its share of the U.S. market for fresh vegetables this season. However, weather and crop development will play an even greater role in determining the actual share (see special article). This summer, the weather has not been in Mexico's favor, as the vegetable-growing regions experienced dry conditions. Later, two hurricanes washed out the first plantings of the fall crops in Northern Sinaloa and caused some replanting in the Culiacan area. However, the heavy rains did replenish reservoirs and restore soil moisture. The volume of vegetable production for fall and winter is

still uncertain, as are Mexico's prospects for large exports.

### Sharp Seasonal Price Increases Unlikely

Grower prices received for fresh vegetables will increase seasonally this fall. However, with larger areas for harvest and consumer expenditures for food and beverages expected to change little from the third quarter, the index of grower prices will probably average 10 to 20 percent lower than last fall's 128 (1977=100). A possible increase in Mexican imports this fall would also tend to limit price advances. A recurrence of the whitefly infestation in California could diminish supplies and boost prices. However, no major problems with the pest have been noted to date. Melons and lettuce are crops most affected by the whitefly and the virus it transmits. For all of 1982, the index will average 120 to 125, compared with 135 in 1981.

The same factors affecting grower prices will also influence retail prices. Smaller increases in marketing costs may also help soften retail gains. Prices will likely increase seasonally during October-December, with the retail price index for fresh vegetables averaging about slightly less to 10 percent higher than last year's 248 (1967=100). For all of 1982, the index will probably

average 5 to 8 percent above 1981's 267. Apparently, increases in marketing margins account for higher retail prices this year in the face of lower grower prices (table 5).

## Prospects for Leading Items

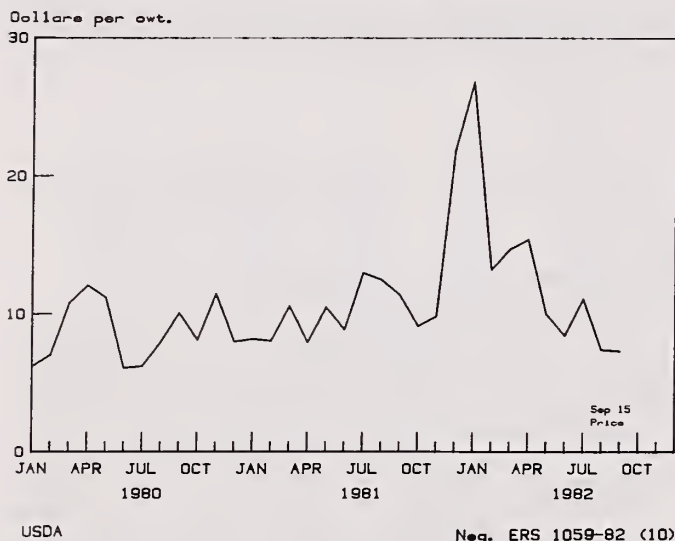
### Lettuce

Lettuce acreage for harvest is estimated at 61,900, a slight increase from fourth-quarter 1981. Production for July-December is projected at 32.4 million cwt, based on a 3-year average. Most of the acreage comes from California's Central Coast and San Joaquin Valley. Thus far, the crop is in good condition in all areas. Some whitefly infestation was noted in California's Imperial Valley. This may pose a threat, but there have been few problems to date.

Compared with a year earlier, Florida and California's Central Coast and the San Joaquin Valley have moderate to sharp declines in fall harvested acreage. On the other hand, New Mexico, Texas, New Jersey, and Arizona have larger areas for harvest.

Lettuce prices were on the downswing again this fall, after a temporary respite from the low prices that prevailed in August and September. F.o.b. prices in mid-October, however, were below last year. Iceberg lettuce from Salinas-Watsonville, California, at \$3 a carton of 24 heads, was \$1.50 less than a year earlier. Despite the currently good growing conditions, prices will likely continue volatile as they respond rapidly to crop developments.

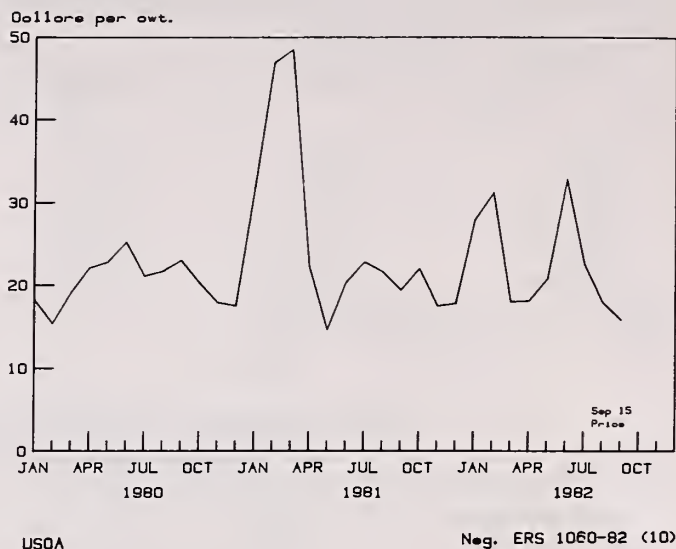
Lettuce: U. S. F. O. B. Shipping Point Price



### Tomatoes

While the estimate of fall area for harvest is up 7 percent from a year earlier, tomato production for June-December, at 13.3 million cwt, will likely be 5 percent less than in 1981, based on 1979-81 yields. Florida acreage rose 8 percent from a year earlier. Through October, the Florida Palmetto-Ruskin crop was in fair to

Tomatoes: U. S. F. O. B. Shipping Point Price



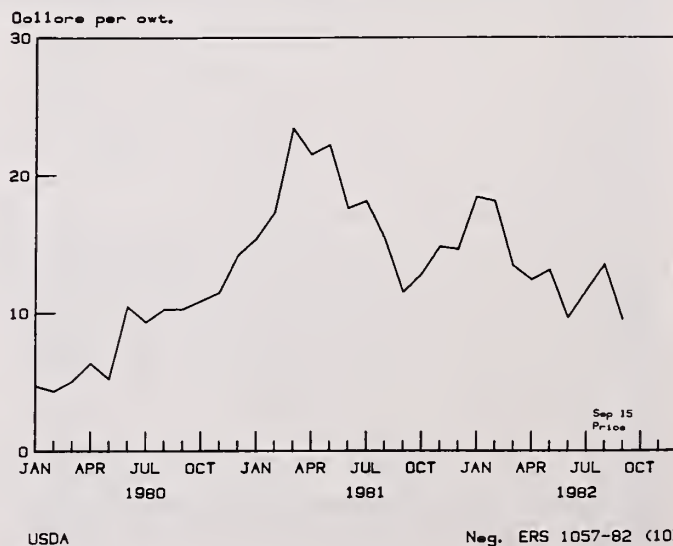
good condition, with harvest underway. In the Fort Pierce-Pompano area, tomato plants were developing abundant blooms, and planting in Dade County has been completed.

Grower prices for tomatoes are lower than a year earlier. In mid-October, the price stood at \$19.60 per cwt, up \$3 from September, but much less than October 1981's price of \$22. Retail prices have followed the trends in shipping point prices. The September retail price for tomatoes, at 54.8 cents a pound, was less than a year earlier and the lowest in 2 years.

### Onions

Production of spring and summer onions is placed at a record 43 million cwt. The crop was up sharply, as acreage registered moderate gains from a year earlier (table 8).

Onions: U. S. F. O. B. Shipping Point Price



**Table 8—Onions: Acreage, yield, and commercial production, major States, 1981 and 1982**

Crop and State	Area		Yield per acre		Production	
	Harvested	For harvest	1981	1982	1981	1982
	1981	1982				
	Acres		Cwt		1,000 cwt	
Spring <sup>1</sup>	25,100	29,000	214	247	5,372	7,173
Summer <sup>1</sup>						
Nonstorage	11,250	11,450	280	277	3,154	3,176
Storage						
Colorado	9,000	11,000	325	380	2,925	4,180
Idaho & Oregon	13,900	14,900	510	491	7,085	7,322
Michigan	7,300	7,400	335	325	2,446	2,405
New York	14,300	14,000	275	225	3,933	4,550
Other <sup>2</sup>	8,480	9,030	363	348	3,081	3,143
Subtotal	52,980	56,330	367	383	19,470	21,600
California <sup>3</sup>	22,300	29,600	315	375	7,025	11,100
Total Summer	86,530	97,380	343	368	29,649	35,876
United States	111,630	126,380	314	341	35,021	43,049

<sup>1</sup>Primarily fresh market. <sup>2</sup>Includes Minnesota, Ohio, Utah, Washington, and Wisconsin. <sup>3</sup>Primarily for processing.

Harvest conditions in New York were good, as late August rains improved the onions' size. Rains in Ohio delayed harvest, while Wisconsin reported smaller sizes. Michigan produced a crop of good size and quality. Further west, rainfall delayed harvest and caused some slight setbacks to the crop.

This October, growers received lower prices than those a year earlier. The much larger crop put downward pressure on prices, but strong Japanese export demand helped to prop up last year's prices. The October grower price of \$6.72 per cwt dropped sharply. Mid-October f.o.b. prices for dry onions ran anywhere from \$2 to \$4 a 50-pound sack of No. 1 or generally good quality onions. Price variations depended on type, size, and point of origin. October f.o.b. prices generally were sharply less than in 1981. Retail onion prices for the third quarter were sharply less than a year earlier. The third-quarter average retail price was 21.7 cents a pound, compared with 40.8 in 1981.

The large summer storage crop and reduced prices have resulted in lower planting intentions for Texas spring onions. The 1983 planted acreage is forecast at 16,500, down 17 percent from 1982. Soil moisture in the Rio Grande Valley was poor, but planting was on schedule. Likewise, Laredo was dry, but Winter Garden had good soil conditions prior to planting.

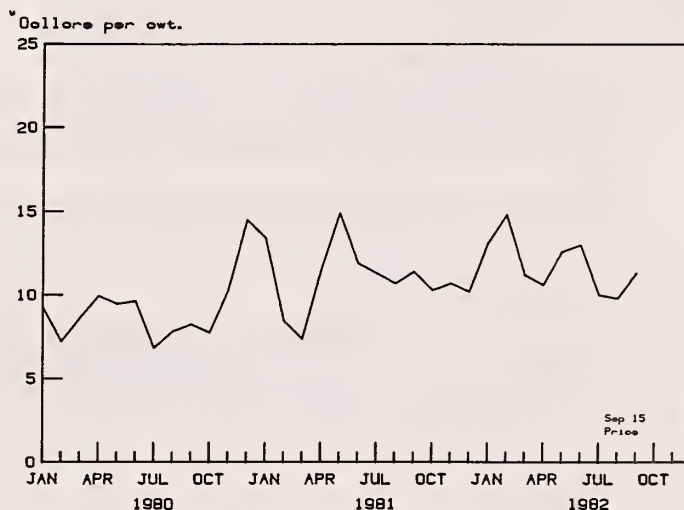
## Celery

Fall celery acreage is expected to total 9,300, up 8 percent from fall 1981. Production during the last half of 1982 is projected to equal 9 million cwt, a 3-percent increase from last year.

The California crop, which represents the major portion of the fall outturn, was in good shape. Weather for planting and development was excellent, with no rain interruptions until September. Volume began to peak in October and should continue high through November. The Florida early crop is making good progress.

Celery prices seemed less affected by increased vegetable supplies and stagnant economic conditions than were other crops. In October, growers received \$8.15 per cwt, compared with \$10.30 in 1981. Through mid-October, f.o.b. prices in Michigan and California were down shar-

## Celery: U. S. F. O. B. Shipping Point Price



USDA

Neg. ERS 1056-82 (10)

ply from last year, showing an early response to increased fall acreage. Retail prices—at 37.4 cents a pound in September—were 1 cent below a year earlier. Retail prices should continue to advance seasonally, but they should be up only slightly from 1981.

## PROCESSED VEGETABLES

### Current Situation

#### Frozen Disappearance Up, Canned Down

The disappearance of eight major frozen items rose slightly during 1981/82 (table 15). Sharp increases in the movement of broccoli, carrots, cauliflower, and snap beans offset declines for lima beans and green peas.

**Table 9—Canned vegetables: Commercial packs, 1980 and 1981, and canners' stocks, 1981 and 1982, by commodities, United States**

Commodity	Pack	Stocks			
				Canners'	
		1980	1981	Date	1981
1,000 cases 24/20's					
Major commodities					
Beans, snap	59,689	52,808	July 1	15,918	12,376
Beets	11,322	9,555	July 1	5,775	4,103
Corn, sweet	50,574	57,949	July 1	4,745	7,311
Peas, green	30,056	27,296	June 1	6,160	5,775
Sauerkraut <sup>1</sup>	11,287	15,289	Aug. 1	2,036	3,203
Total	162,928	160,897		34,634	32,768
Tomato items					
Tomatoes	53,097	51,937	July 1	10,275	8,601
Tomato juice <sup>2</sup>	27,617	17,507	July 1	3,014	3,218
Total	80,714	69,444		13,289	11,819
Other commodities					
Asparagus	2,535	2,844	Mar. 1	728	648
Beans, lima	2,833	2,602	Aug. 1	652	521
Field peas	1,965	2,895		—	—
Carrots	5,084	4,639	July 1	2,312	2,269
Okra <sup>3</sup>	391	264		—	—
Pickies <sup>1</sup>	68,227	64,443		—	—
Pimentos	540	608		—	—
Pumpkin and squash	3,744	3,975	July 1	581	816
Potatoes	15,043	15,039		—	—
Sweetpotatoes	5,917	7,955		—	—
Spinach	6,314	5,458	Mar. 1	3,407	3,301
Other greens	2,624	2,120		—	—
Total comparable					
other items	115,217	112,842		7,680	7,555
Grand total comparable items	358,862	343,183		55,603	52,142

<sup>1</sup>Crop for processing converted to a canned basis by applying an overall conversion factor (pickles 112 and sauerkraut 54 cases equivalent to 1 ton fresh). <sup>2</sup>Includes combination vegetable juices containing at least 70 percent tomato juice. <sup>3</sup>Okra; okra and tomatoes; and okra, corn and tomatoes.

SOURCE: Canners' stock and pack data from the National Food Processors Association. Pickles and sauerkraut pack data derived from SRS data. Sauerkraut stocks, National Kraut Packers Association.

**Table 10—Frozen vegetables: United States, cold storage holdings, October 1, and net change July 1 to October 1**

Commodity	October 1 Stocks			July 1-October 1 Net Change		
	1980	1981	1982 <sup>1</sup>	1980	1981	1982 <sup>1</sup>
Million pounds						
Asparagus	11	9	11	-5	-3	-2
Beans, lima	103	62	73	38	33	55
Beans, snap	240	233	253	149	152	184
Broccoli	104	104	131	-3	14	24
Brussels sprouts	23	25	17	-2	-2	-6
Carrots	81	48	82	-18	-16	6
Cauliflower	47	38	45	6	10	21
Corn, cut	180	218	336	113	176	296
Corn-on-cob	183	194	269	98	156	215
Mixed vegetables	45	41	48	-2	5	8
Onions	25	26	28	-1	7	3
Peas	328	295	366	150	157	224
Peas and carrots	11	10	12	( <sup>4</sup> )	1	2
Pumpkin and squash	35	39	49	1	6	14
Southern greens <sup>2</sup>	24	23	25	-7	-10	-7
Spinach	71	91	76	-25	-21	-33
Okra	43	38	51	13	17	29
Peas, blackeye	6	9	9	( <sup>4</sup> )	6	3
Miscellaneous vegetables	174	175	197	40	52	65
Total <sup>3</sup>	1,734	1,678	2,078	545	740	1,101
French fried potatoes	526	468	502	-298	-199	-276
Other frozen potatoes	101	96	124	-39	-29	-34
Total frozen potatoes	627	564	626	-337	-228	-310
Grand Total <sup>3</sup>	2,361	2,242	2,704	208	512	791

<sup>1</sup>Preliminary. <sup>2</sup>Includes collards, kale, mustard, and turnip greens/turnips. <sup>3</sup>May not add due to rounding. <sup>4</sup>Less than 0.5.

SOURCE: Cold Storage, SRS, USDA.

Broccoli will likely move ahead of green peas as Americans' second favorite frozen vegetable (behind sweet corn) during 1982/83.

In contrast, the movement of eight major canned vegetables fell about 6-1/2 percent during 1981/82, as both a reduced carryover and pack limited supplies (table 14). Weakened economic conditions that limited personal consumption expenditures on food and beverages may have also contributed. Significant drops in the disappearance of tomato juice, whole tomatoes, and green peas caused the bulk of the decline.

### Carryover Stocks Down

Canners of major vegetables held 7 percent less inventory entering the 1982/83 season. Tomato products were in particularly short supply after two consecutive small harvests in California. Also, stocks of beets declined sharply. However, the sauerkraut and sweet corn carryover jumped sharply. In general, consumer-size stocks were ample, while institutional-size cans were in tighter supply (table 9).

The carryover of major frozen vegetables was down slightly. Substantial rises in the holdings of carrots, sweet corn, and spinach nearly offset declines for lima beans, snap beans, and broccoli. The increased shipments of some items during 1981/82 caused the lower carryover.

On October 1, stocks of frozen vegetables reached a record-high 2.1 billion pounds, one-fourth more than last year and nearly a fifth larger than the 1977-81 average (table 10). Holdings of all items were above a year ago

except spinach and brussels sprouts. The stock buildup comes from larger contracted acreage for sweet corn, green peas, and snap beans, resulting in higher packs. In addition, harvested area of broccoli, carrots, and cauliflower has been higher this year. The larger stocks may also reflect dampened sales.

### Little Change in Prices

Wholesale and retail prices of processed vegetables have remained stable during 1982, in contrast with 1981. The Bureau of Labor Statistics (BLS) wholesale price index for canned vegetables stood at 240.6 (1967=100) during September, a 3-percent rise from a year ago, but the lowest reading in 1982. The index has retreated after peaking at 245.5 in July. Trending upward throughout the year, the wholesale index for frozen vegetables equaled 284.1 (1967=100) in September, up 6 percent from last year. The BLS Consumer Price Index for processed vegetables was 139.8 during September, a 3-percent rise from a year earlier. For 1982, increases in the three indexes will be smaller than in the previous 2 years (table 12).

The slower price increases are primarily traceable to a smaller rise in the farm-to-retail price spread. The spread will average 4 to 5 percent higher during 1982, compared with a gain of more than a tenth in 1981. Smaller wage hikes in food-processing industries have contributed to the smaller spread increases. Some softness in demand, especially for canned vegetables, has also probably limited price increases so far in 1982.

**Table 11 — Processed vegetables: Retail price, marketing margin, and grower and packer return per unit, sold in Baltimore, indicated months, 1981 and 1982**

Commodity, month, and retail unit	Retail price <sup>1</sup>	Marketing margin		Grower and packer return (Fob shipping point prices) <sup>2, 3</sup>	
		Absolute	Percentage of retail price	Absolute	Percent of retail price
	Cents	Cents		Cents	
Beans (frozen) 9 oz.					
July 1982	42.0	37.1	88	5.4	12
Apr. 1982	56.0	50.5	90	5.5	10
July 1981	49.0	43.7	89	5.3	11
Corn (canned) 303					
July 1982	47.0	39.0	83	8.0	17
Apr. 1982	44.0	36.0	82	8.0	18
July 1981	42.0	35.6	85	6.4	15
Corn (frozen) 10 oz.					
July 1982	62.0	54.4	88	7.6	12
Apr. 1982	57.0	49.4	87	7.6	13
July 1981	47.0	40.1	85	6.9	15
Peas (canned) 303					
July 1982	45.0	37.0	82	8.0	18
Apr. 1982	44.0	36.0	82	8.0	18
July 1981	42.0	34.1	81	7.9	19
Peas (frozen) 10 oz.					
July 1982	63.0	56.5	90	6.5	10
Apr. 1982	62.0	55.4	89	6.6	11
July 1981	49.0	42.6	87	6.4	13
Tomatoes (canned) 303					
July 1982	55.6	50.9	92	4.7	8
Apr. 1982	55.4	50.7	92	4.7	8
July 1981	51.6	47.2	91	4.4	9

<sup>1</sup>Retail prices from Maryland Department of Agriculture. <sup>2</sup>For quantity of product equivalent to retail unit sold to consumers; because of waste and spoilage during marketing, equivalent quantity exceeds retail unit. <sup>3</sup>Production area: beans (frozen) Western; corn (canned) Northwest; corn (frozen) Western; peas (sweet canned) Midwest; peas (frozen) West; tomatoes (canned) California.

**Table 12—Consumer Price Index for processed vegetables, 1978-82**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
<i>December 1977=100</i>													
1978	101	102	102	103	103	103	104	105	105	106	106	107	104
1979	107	107	108	108	109	109	110	111	111	111	111	112	110
1980	113	114	115	115	115	116	118	119	120	121	122	123	118
1981	124	126	127	129	130	132	135	136	136	136	135	137	132
1982	138	138	138	139	139	139	140	141					<sup>1</sup> 140

<sup>1</sup>Unofficial ERS estimate.

SOURCE: Bureau of Labor Statistics.

**Table 13—Harvested acreage and production of commercial vegetables for processing**

Commodity	Harvested <sup>1</sup>			Production <sup>1</sup>			
	1980	1981	For harvest 1982	1980	1981	Indicated 1982	1982 as percentage of 1981
	<i>1,000 acres</i>			<i>1,000 tons</i>			
Beans, snap	255.7	209.6	199.0	704.2	647.2	620.2	96
Corn, sweet	377.4	396.5	437.2	2,158.0	2,333.5	2,611.3	112
Peas, green	321.7	294.3	304.7	484.2	462.5	445.8	96
Tomatoes	263.0	248.4	297.8	6,210.6	5,621.8	7,072.8	126
Total <sup>2</sup>	1,217.8	1,148.8	1,238.7	9,557.1	9,065.0	10,750.0	119

<sup>1</sup>Contract. <sup>2</sup>May not add to total due to rounding.

SOURCE: Vegetables, SRS, USDA.

### Tonnage of Major Vegetables Increases

Contracted tonnage of the four major processing vegetables (snap beans, green peas, sweet corn, and tomatoes) rose to 10.8 million tons this year, up nearly a fifth from last year (table 13). Tomato production, which accounts for two-thirds of the total, increased by over a fourth. The large rise comes after sharply reduced crops in 1980 and 1981 left supplies of tomato products very tight.

The sweet corn outturn, at 2.6 million tons, rose to a record high. Because of increased per capita consumption of frozen sweet corn, which has risen by a third the past decade, processors increased their contracted area. The larger acreage combined with record yields to cause this year's alltime-high output.

In contrast, green pea production has declined in recent years in the face of falling per capita consumption. This year's output, down moderately from 1981, is the lowest since 1954. In addition, snap bean tonnage declined to its lowest level since 1976.

Meanwhile, production of dual-use crops during the first half of 1982 showed mixed results. Output of broccoli and carrots for fresh market and processing rose moderately from last year, while the cauliflower outturn declined about a tenth. Rainy spring weather in California reduced the broccoli and cauliflower harvests. For second-half 1982, the output of broccoli and carrots again is expected to gain moderately from a year ago (based on 1979-81 average yields), while cauliflower production will rival that of last year. Early fall rains in California probably had no adverse effects on the broccoli and cauliflower crops.

**Table 14—Canned vegetable supplies and disappearance<sup>1</sup>**

Year	Pack and carryover	Disappearance
<i>Million cases 24/303's</i>		
1979/80	322	266
1980/81	301	253
1981/82	282	237
1982/83 <sup>2</sup>	270-290	

<sup>1</sup>Eight items—lima beans, snap beans, beets, sweet corn, green peas, sauerkraut, tomatoes, and tomato juice. <sup>2</sup>Projected based on SRS raw tonnage estimates.

SOURCE: National Food Processors Assn. (NFPA), National Kraut Packers Assn.

### Outlook

#### Frozen Supplies Increase, Canned Supplies Little Changed

For 1982/83, a moderate increase in the pack of frozen vegetables will more than offset the small decrease in carryover stocks. Thus, frozen supplies will be the largest since 1979/80 (table 15). Earlier in the year, processors indicated they would substantially increase their contracted area for lima beans, snap beans, green peas, and sweet corn. The tonnage for broccoli and carrots has already increased this year. The rises in production

**Table 15—Frozen vegetable supplies and disappearance<sup>1</sup>**

Year	Pack and carryover	Disappearance
<i>Million pounds</i>		
1979/80	2,927	2,156
1980/81	2,638	2,206
1981/82	2,684	2,162
1982/83 <sup>2</sup>	2,755-2,855	

<sup>1</sup>Eight items—lima beans, snap beans, broccoli, carrots, cauliflower, sweet corn, green peas, and spinach. <sup>2</sup>Projected based on SRS raw tonnage estimates and American Frozen Food Institute data.

SOURCE: Cold Storage, SRS, USDA, and American Frozen Food Institute.

apparently have been translated into larger packs, because October 1 stocks of these items were all well above a year ago. October 1 stocks of other vegetables also rose considerably from last year (table 10).

Meanwhile, supplies of the major canned vegetables will approximate last year's (table 14). Tomato products and sweet corn will increase because of the gain in raw tonnage. Cannors indicated earlier this year that they intended to reduce their tonnage needs (and hence, packs) for lima beans, snap beans, and green peas. Although no pack data are yet available, 1982/83 supplies of those items will likely be substantially reduced from last year. Supplies of these vegetables have steadily declined the past several years as per capita consumption has trailed off.

### Little Change Expected in Prices

Processed vegetable prices will probably vary little in the coming months. However, the enormous quantity of frozen vegetables held on October 1 may present some price reductions in the months ahead. Prices of sweet corn, carrots, green peas, and snap beans, in particular, could come under pressure.

Canned vegetable prices (as measured by the BLS wholesale price index), which have actually declined relative to the start of the year, will likely exhibit stability. Shipments of canned vegetables have been slow in 1982, and the pace is not likely to pick up dramatically in the months ahead. However, some items, such as snap beans and green peas, are in short supply, and their prices could move upward. Although the pack of tomato products should be up considerably this year, the carryover was also low. This uncertainty as to the magnitude of supplies may keep prices from falling in coming months.

The Consumer Price Index for processed vegetables will probably average 3 to 7 percent higher next year, compared with annual rises of 6 and 12 percent in 1982 and 1981, respectively. Smaller increases in marketing costs, which follow general inflationary patterns, will also probably temper any price gains for processed vegetables.

### Prospects for Leading Items

#### Tomato Products

Production of tomatoes for processing totaled about 7.1 million tons this year, a fourth more than in 1981, but less than the 7.4 million tons processors had contracted

**Table 16—Canned tomatoes: Supply and disappearance**

	1980/81	1981/82	1982/83
<i>Million cases 24/303's</i>			
Carryover	12.3	10.3	8.6
Pack	53.1	52.7	<sup>1</sup> 53.0-57.0
Total supply	65.4	63.0	<sup>1</sup> 61.6-65.6
Disappearance	55.1	54.4	

<sup>1</sup>Unofficial ERS estimate.

**Table 17—Canned tomato juice: Supply and disappearance**

	1980/81	1981/82	1982/83
<i>Million cases 24/303's</i>			
Carryover	6.5	3.0	3.2
Pack	27.6	17.5	<sup>1</sup> 23.5-26.5
Total supply	34.1	20.5	<sup>1</sup> 26.7-29.7
Disappearance	31.0	17.3	

<sup>1</sup>Unofficial ERS estimate.

for earlier in the year. A sharp rise in area and a record-high average yield of 23.75 tons an acre boosted output.

The shortfall from cannors' earlier intentions came primarily from California. After a wet spring delayed planting, growing conditions were nearly ideal this summer. However, as feared, late September rains forced growers to bypass some mature fields, as the wet conditions rendered the fields impassable for machinery. The California outturn totaled 6.1 million tons, versus the 6.4 million processors had desired. Elsewhere, excellent growing conditions and increased acreage caused a 50-percent jump in the combined production of Ohio, Indiana, and Michigan, the second largest growing region.

Carryover stocks of all products except tomato juice declined from last year. Holdings of tomato paste, puree, catsup, and chili sauce were acutely tight. Meanwhile, the larger production will translate into bigger packs of the various tomato products. Although no pack data are yet available, total supplies for 1982/83 will likely approximate last year's levels, striking a relatively good balance between supply and demand. However, the shortfall from processors' tonnage intentions could presage shortages of some products later in the marketing year. However, until final pack data become available, prices should remain steady. The domestic industry is traditionally price competitive, and imports have

**Table 18—Tomato product imports**

Year	Canned tomatoes	Tomato paste	Tomato sauce	Total
<i>1,000 pounds</i>				
1977	72.1	65.2	17.3	154.6
1978	74.1	51.0	7.1	132.2
1979	45.6	42.1	2.8	90.5
1980	39.9	25.5	1.7	67.1
1981	97.2	65.2	9.1	151.5
1982 <sup>1</sup>	100.0	154.3	8.3	262.6

<sup>1</sup>January-August total.

SOURCE: Bureau of Census.

upped their market share significantly the past 2 years. These factors could also prevent major price runups in the coming months.

In September, the BLS wholesale price index for canned whole tomatoes was 14 percent higher than a year ago, while the average retail price, at 55 cents a pound, was up 2-1/2 cents. Meanwhile, industrial 55-gallon barrels of tomato paste (31 percent solids) were quoted at 60 cents a pound during mid-October, compared with 53 to 58 cents last fall and 67 to 68 cents in June.

Imports of canned tomato products have increased sharply in the wake of reduced U.S. production the previous 2 years (table 18). During January-August 1982, imports of canned tomatoes, tomato paste, and tomato sauce rose nearly 300 percent from a year ago. Most notable was the upsurge in tomato paste imports—over six times greater this year. Taiwan, Mexico, and Portugal provided the bulk of the tomato paste imports. Italy and Spain accounted for about 80 percent of canned tomato imports, while Israel has been the major foreign supplier of tomato sauce.

Because of weather-induced damage to the Italian processing-tomato crop, this year's Mediterranean harvest will be below previous expectations. In addition, production will probably be slightly smaller than last year's.

### Sweet Corn

With a record-large sweet corn crop and higher carryover this year, supplies of both canned and frozen sweet corn should be abundant in the coming year. Based on processors' earlier indications and normal raw tonnage/pack relationships, this year's canned pack will approximate last year's. However, a rise in carryover stocks should leave 1982/83 supplies moderately higher than a year ago. Recent stock data showed consumer-size cans well above last year, while institutional holdings were down a fifth, the lowest since 1975.

With larger supplies imminent, the BLS wholesale price index for canned whole-kernel sweet corn during September stood at 201.2 (1967=100), 3 percent less than a year ago and down from 217.1 in July. Some additional slight declines may occur, depending on final pack data and the sales pace. Disappearance during 1981/82 totaled 55.3 million cases, slightly less than a year earlier and the lowest since 1976/77.

Freezers' intentions to sharply boost their sweet corn pack have apparently been realized. Frozen stocks of sweet corn on October 1 totaled 606 million pounds, nearly 50 percent more than a year ago and a record high. Both cut-corn and cob-corn holdings shared in the rise. However, relatively strong disappearance during 1981/82 and a smaller-than-normal carryover have kept

**Table 19—Canned sweet corn: Supply and disappearance**

	1980/81	1981/82	1982/83
	<i>Million cases 24/303's</i>		
Carryover	9.6	4.7	7.3
Pack	50.6	57.9	<sup>1</sup> 56.5-58.5
Total supply	60.2	62.6	<sup>1</sup> 63.8-65.8
Disappearance	55.5	55.3	

<sup>1</sup>Unofficial ERS estimate.

**Table 20—Frozen sweet corn: Supply and disappearance**

	1980/81	1981/82	1982/83
	<i>Million pounds</i>		
Carryover	151.5	79.7	92.2
Pack	529.1	619.4	<sup>1</sup> 630.0-650.0
Total supply	680.6	699.1	<sup>1</sup> 722.2-742.2
Disappearance	600.9	606.9	

<sup>1</sup>Unofficial ERS estimate.

prices firm, with wholesale prices of 24/10-ounce cartons of cut corn listing at about 45 cents more than last year. Wholesale prices for cob corn (12/4-ear packages) listed at about 50 cents more than last year. The large October 1 stocks could auger some price reductions in coming months. However, frozen sweet corn demand has steadily increased the past several years, which could limit any price drops.

### Green Peas

Based on canners' acreage intentions and normal raw tonnage/pack relationships, this year's green pea pack was probably the smallest since 1939, leaving supplies the lowest since that year. Per capita consumption has steadily declined as consumption of canned vegetables, in general, has dropped. Furthermore, the emergence of broccoli and cauliflower as popular side-dish vegetables has nudged out peas. Carryover stocks of retail-size cans rose from a year earlier, while foodservice stocks declined sharply.

**Table 21—Canned green peas: Supply and disappearance**

	1980/81	1981/82	1982/83
	<i>Million cases 24/303's</i>		
Carryover	6.2	6.2	5.8
Pack	30.1	27.3	<sup>1</sup> 21.5-23.5
Total supply	36.3	33.5	<sup>1</sup> 27.3-29.3
Disappearance	30.1	27.7	

<sup>1</sup>Unofficial ERS estimate.

**Table 22—Frozen green peas: Supply and disappearance**

	1980/81	1981/82	1982/83
	<i>Million pounds</i>		
Carryover	178.3	138.1	144.1
Pack	315.6	333.9	<sup>1</sup> 377.0-387.0
Total supply	493.9	472.0	<sup>1</sup> 521.1-531.1
Disappearance	355.8	327.9	

<sup>1</sup>Unofficial ERS estimate.

In September, the BLS wholesale price index for green peas, at 192.4 (1967=100), was 3 percent below last year and down from the yearly high of 200.4 in July. However, prices could firm up considerably in coming months because of the reduced supply. If disappearance is close to the relatively small total of 1981/82, carryover stocks next year would be extremely tight.

In contrast, a sharply higher frozen pea pack and increased carryover yielded the largest supply in several years. The BLS wholesale price index for frozen peas during September equaled 312.4 (1967=100), 7 percent above a year ago. Year-to-year gains in the index have slowed in recent months. The ample supplies could portend some softening of prices during late 1982 or early 1983.

## Snap Beans

Supplies of processed snap beans for 1982/83 are similar to green peas. Frozen stocks are substantially higher, while canned offerings are down about a tenth. Both a smaller pack and carryover caused the decline for canned snap beans. Despite the lower canned stocks through most of 1982, the BLS wholesale price index for canned snap beans has been below a year earlier since winter. In September, the index was 186, down 8 percent from last year and the lowest reading in over 2 years. However, some price rises may occur during 1982/83 because of the supply reduction.

October 1 stocks of frozen beans totaled a near-record-high 253 million pounds. The July 1 to October 1 buildup was the largest on record. Strong sales during 1981/82 reduced stocks, and freezers sharply increased their contracted acreage this year. Cartons of 24/9-ounce packages were listed at \$7.95 in October, compared with \$7.10 to \$7.50 last year. The larger supplies available this year should moderate any price increases.

**Table 23—Canned snap beans: Supply and disappearance**

	1980/81	1981/82	1982/83
<i>Million cases 24/30's</i>			
Carryover	11.3	15.9	12.4
Pack	59.7	52.8	<sup>1</sup> 50.0-52.0
Total supply	71.0	68.7	<sup>1</sup> 62.4-64.4
Disappearance	55.1	56.3	—

<sup>1</sup>Unofficial ERS estimate.

**Table 25—Potatoes: Prices f.o.b. shipping points, U.S. No. 1 grade or better, indicated periods, 1980 and 1981**

Shipping point and variety	1981			1982		
	August 8	September 5	October 3	August 7	September 3	October 8
<i>Dollars per cwt</i>						
New Jersey Round whites	—	6.38	6.68	—	4.50	4.76
Long Island, N.Y., Round whites	7.38	6.26	6.68	—	4.96	4.62
Michigan Round whites	7.10	6.00	6.64	5.12	3.72	3.90
Minnesota Reds	8.55	7.38	7.00	—	—	—
Colorado Reds	9.00	—	9.00	—	—	7.50
Washington Norgolds	19.12	14.13	11.00	15.30	11.85	9.05

F.o.b. prices are simple averages of the range of daily prices for the week ended on indicated day.

SOURCE: Market News Service reports.

**Table 24—Frozen snap beans: Supply and disappearance**

	1980/81	1981/82	1982/83
<i>Million pounds</i>			
Carryover	91.2	80.9	67.4
Pack	236.5	247.9	<sup>1</sup> 295.0-310.0
Total supply	327.7	328.8	<sup>1</sup> 362.4-377.4
Disappearance	246.8	261.4	

<sup>1</sup>Unofficial ERS estimate.

## POTATOES

### Recent Developments

#### Summer Prices Slip Downward

The third-quarter average for grower prices was \$6.52 per cwt, down substantially from a year earlier. With the larger fall crop looming, September grower prices showed a sharp decline from August and July. The drop marked the beginning of the seasonal downturn, as the early fall harvest began. Also, it marked a return to pre-1980 price levels, after a 2-year period of relatively short supplies and high prices (table 26).

A sampling of October grower prices from the major potato States follows the same pattern. Maine farmers received \$3.50 per cwt; New York, \$4.90; Wisconsin, \$4.10; North Dakota, \$3.80; Idaho, \$4.05; and Washington, \$3.25. For all States, average prices, at \$3.97, were about even with 1981.

Retail potato prices throughout 1982 have been consistently lower than a year ago, but somewhat above the past 5 years. The retail price index (1967=100) for the third quarter, at 324, was substantially below 1981.

#### Utilization of the 1981 Crop

The larger 1981 potato crop resulted in across-the-board increases in utilization. Tablestock sales increased

**Table 26—Potatoes: U.S. monthly and season average prices received by growers, 1977-82**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season average <sup>1</sup>
<i>Dollars per cwt</i>													
1977	3.44	3.52	3.59	3.94	4.42	4.57	5.27	4.01	3.29	3.11	3.08	3.10	3.55
1978	3.24	3.20	3.25	3.30	3.84	5.32	6.71	4.92	3.49	3.07	3.08	3.07	3.38
1979	3.09	2.77	2.94	2.82	3.08	3.00	3.41	3.61	3.23	3.14	3.35	3.51	3.43
1980	3.44	3.37	3.23	3.21	3.75	4.35	6.19	7.79	6.02	4.42	5.47	6.63	6.55
1981	7.39	7.51	8.12	8.41	8.22	9.13	9.67	7.06	4.84	4.01	4.43	4.63	5.41
1982	4.63	4.78	4.86	5.28	6.26	8.01	7.93	7.00	4.62	3.97			<sup>2</sup> 4.50

<sup>1</sup>Season average price of crop in indicated year. <sup>2</sup>Unofficial ERS estimate.

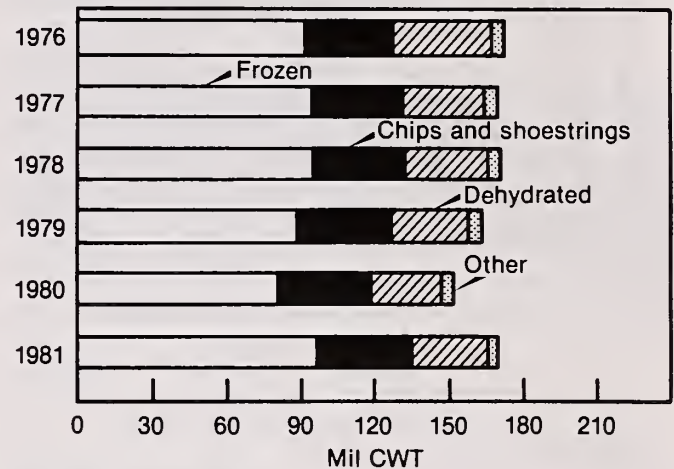
SOURCE: Agricultural Prices, SRS, USDA.

**Table 27—Potato exports<sup>1</sup>**

Crop year Oct.-Sept.	Dehy- drated	Fresh	Total	Percent of crop
<i>Mil. cwt</i>				
1974/75	1.7	4.0	5.7	2
1975/76	10.6	10.6	21.2	7
1976/77	15.7	10.3	26.0	7
1977/78	6.6	3.4	10.1	3
1978/79	8.1	2.9	11.0	3
1979/80	8.3	2.0	10.3	3
1980/81	5.2	2.8	8.0	3
1981/82 <sup>2</sup>	5.2	2.3	7.5	2

<sup>1</sup>Fresh-weight basis. <sup>2</sup>October-August.

SOURCE: Bureau of Census.

**Processed Potato Use\***

\*For crop of indicated years.

USDA

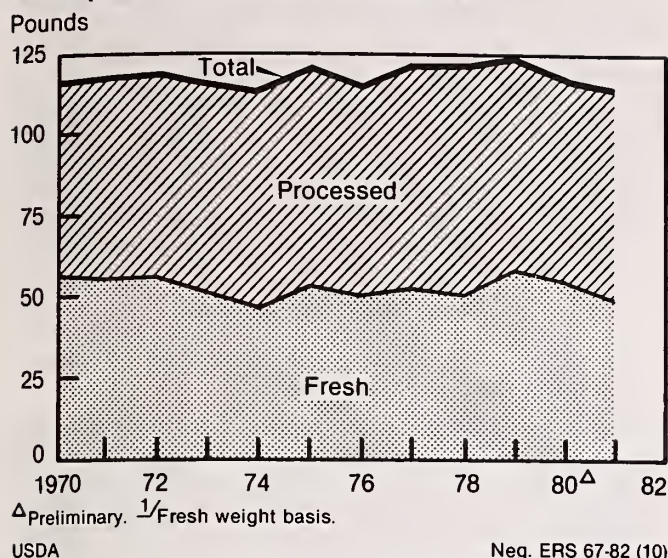
Neg. ERS 2235-82 (10)

**Table 28—Production and per capita consumption of potatoes, 1965-81**

Year	Production	Per capita consumption						
		Total fresh and processed	Fresh	Processed <sup>1</sup>				
				Total <sup>4</sup>	Canned <sup>2</sup>	Frozen	Chips and shoestrings	Dehy- drated
Million cwt		Pounds						
1965	291.1	107.1	67.9	39.3	1.7	14.3	15.8	7.0
1966	307.2	117.0	72.0	44.9	1.7	17.3	16.7	8.7
1967	305.8	108.6	62.1	46.5	1.7	19.0	16.8	8.4
1968	295.4	115.5	65.7	49.8	1.9	21.2	17.1	9.1
1969	321.6	117.0	61.3	55.7	2.0	24.6	17.7	11.0
1970	325.7	116.8	57.3	59.5	2.0	27.7	17.6	11.8
1971	319.3	118.3	56.0	62.2	2.1	30.2	17.3	12.1
1972	296.4	118.8	56.6	62.2	2.2	30.5	16.9	12.3
1973	300.0	115.9	51.1	64.8	2.3	32.9	16.5	12.7
1974	342.4	113.2	47.4	65.8	2.3	32.7	16.0	14.4
1975	322.0	120.5	53.8	66.7	2.0	34.3	15.7	14.4
1976	357.7	115.1	50.5	64.6	1.9	36.4	16.0	10.0
1977	355.3	120.3	53.6	66.7	2.2	36.5	16.6	11.1
1978	366.3	121.1	51.5	69.6	2.2	38.8	17.0	11.3
1979	342.5	124.3	59.0	65.3	2.1	35.4	17.1	10.4
1980	302.9	117.7	55.8	61.9	1.9	33.7	16.9	9.1
1981 <sup>3</sup>	338.6	114.6	49.1	65.5	1.8	36.3	16.7	10.3

<sup>1</sup>Fresh-weight basis. <sup>2</sup>Includes potatoes canned in soups, stews, and other combinations. <sup>3</sup>Preliminary. <sup>4</sup>Includes flour.

## Per Capita Consumption of Potatoes



14 percent from 1980, but they were still 4 percent lower than in 1979. In terms of proportionate shares, the percentage of fresh use to total production—33 percent—has held fairly steady over the past 3 years. Frozen products exhibited sharp gains from 1981, as processors rebuilt stocks that were drawn down from the short 1980 crop. The percentage of potatoes used as frozen products has remained unchanged since 1979.

## Per Capita Consumption Down in 1981

Per capita potato consumption totaled 115 pounds (fresh-weight equivalent) in 1981, compared with 118 during 1980 (table 28). A 3-1/2-pound rise in processed potato consumption (to 65-1/2 pounds) was not enough to offset a 6-1/2-pound decline in tablestock use (to 49 pounds, the second lowest on record). Between 1970 and 1981, consumption ranged from 113 to a record-high 124 pounds (in 1979), averaging 118 pounds.

In general, processed potato use has been stable over the past decade, while tablestock consumption has varied

with the size of the crop. This contrasts with the 1960's, in which processed consumption (mostly frozen potato products) rose 130 percent, while tablestock use declined by a third. The proportion of fresh and processed use to total consumption has actually remained steady, given changes in the population base and structure, and the continued flow of women into the work force. Nevertheless, the popularity of processed potatoes remains assured.

## Outlook

### Fall Crop Largest Since 1978

Fall potato production is forecast at 306.9 million cwt, about a 4-percent gain from last year and the largest fall crop since 1978 (tables 29 and 30). Larger harvested area—1.09 million acres versus 1.05 in 1981—caused the rise. The average yield per acre, at 280 cwt, is one less than last year. (Nine times in the last 10 years the October production estimate has been less than the final

**Table 29—Fall potatoes: Production by areas, United States**

Year	Eastern States	Central States	Western States	Total <sup>1</sup>
<i>Million cwt</i>				
1974	60	66	163	289
1975	48	55	175	278
1976	51	58	199	308
1977	50	68	189	307
1978	47	71	207	325
1979	49	62	186	297
1980	42	55	170	266
1981	46	64	185	296
1982 <sup>2</sup>	45	68	194	307

<sup>1</sup>May not add to total due to rounding. <sup>2</sup>Indicated as of October 1.

SOURCE: Crop Production, SRS, USDA.

**Table 30—Irish potatoes: Acreage, yield per acre, and production, annual 1980, 1981, and indicated 1982**

Seasonal group	Acreage			Yield per acre			Production <sup>1</sup>		
	Harvested		For harvest 1982	1980	1981	Indicated 1982	1980	1981	Indicated 1982
	1980 <sup>1</sup>	1981							
	1,000 acres			Cwt			1,000 cwt		
Winter	11.5	11.6	11.0	205	189	206	2,363	2,198	2,263
Spring	71.6	78.0	78.0	238	266	260	17,067	20,765	20,243
Summer	90.1	95.0	95.5	189	211	216	16,999	20,035	20,587
Fall									
Eastern	178.8	177.5	184.5	236	258	244	42,193	45,870	45,019
Central	283.7	293.8	312.4	193	218	217	54,672	64,124	67,807
Western	518.7	572.7	597.6	327	323	325	169,563	185,244	194,071
Total	981.2	1,052.5	1,094.8	272	281	280	266,428	295,593	306,897
United States	1,154.4	1,237.1	1,279.3	262	274	274	302,857	338,591	349,990

<sup>1</sup>Revised.

SOURCE: Crop Production, SRS, USDA.

one. This does not imply the current forecast understates or overstates final production.)

Fall production in the Eastern States is forecast at 45 million cwt, a 3-percent decrease from last year. The Maine crop, at 24.7 million cwt, is the smallest since 1939. Although that State's output has been falling steadily in recent years, a wet spring and dry summer adversely affected yields and production.

In the Central States, the fall outturn rose 6 percent to 67.8 million cwt. However, heavy summer rains held production to below a year ago in the Red River Valley. Production jumped by over a fifth in Wisconsin (which had record-high yields) and Michigan. If recent trends continue, Wisconsin—whose Central Sands area is very conducive to potato production—may surpass Maine in the near future as the third leading producing State.

A 5-percent increase is forecast in the Western States, which account for 60 to 65 percent of the fall crop. Both acreage and yields are generally up. Idaho, the top producing State, had a good growing season, and production gained 7 percent from 1981—to 90.7 million cwt. However, rain and cold weather delayed that State's harvest. Washington farmers produced 55 million cwt, moderately above last year.

### Prices To Average Lower

With higher production, grower and retail prices during the 1982/83 marketing season will probably average substantially less than a year ago. During the past decade, a fall crop that is greater than 300 million pounds has tended to push prices down considerably. However, good quality in many areas could boost prices.

Processor demand will also affect prices. Frozen potato stocks totaled 627 million pounds on October 1, more than 10 percent above a year earlier, but only slightly higher than the 1977-81 average. With ample stocks on hand, processors may be reluctant to purchase overages on their grower contracts. The larger available supplies should keep prices on open-market purchases at modest levels. Also, with softness in the general economy, consumer demand may not warrant processor purchases. However, the net disappearance of frozen potato products between July 1 and October 1 was slightly more than normal. Processor contracts with growers this year generally paid about the same as a year ago.

The smaller crop in the Red River Valley could strengthen grower prices. A significant portion of the potatoes used in potato chips come from that region (where the leading variety is the Norchip). Use of pota-

toes for chips varies little from year to year; therefore, heightened competition for the smaller output may aid grower prices in that area.

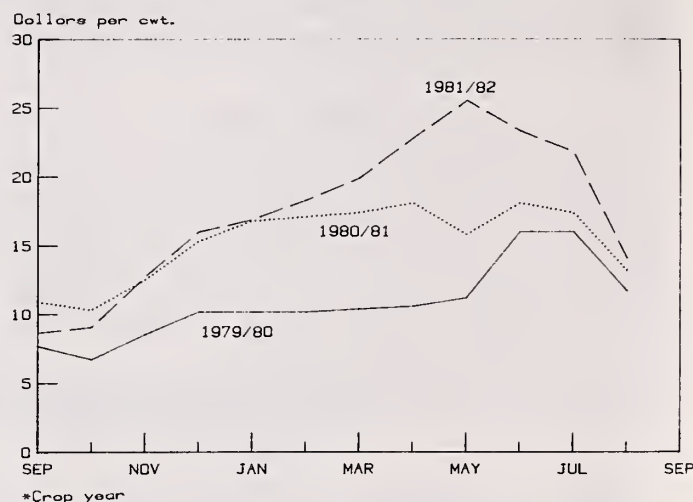
Growers will probably receive a season-average price of \$4 to \$4.50 per cwt, compared with \$5.41 and \$6.55 for 1981 and 1980, respectively. For the fourth quarter of 1982, grower prices will likely be 10 to 20 percent below a year ago. Meanwhile, fourth-quarter retail prices for tablestock potatoes will decline in a similar way. For the entire year, retail prices will likely average about 15 percent less than 1981's record-high 25 cents a pound.

## SWEETPOTATOES

### 1982 Crop Largest Since 1965

Forecasts of sweetpotato production rose from August to October, as prospects for the 1982 crop looked increasingly brighter in North Carolina and California. The final forecast, at 14.6 million cwt, is 14 percent above a year ago (table 3). The yield per acre, at 128 cwt, is record large, and the indicated area for harvest was up 5 percent. Although some acreage was abandoned in North Carolina because of heavy rains and low prices, supplies will be heavy this fall and winter.

Sweetpotatoes: U. S. Grower Prices\*



\*Crop year

USDA

Neg. ERS 3074-82 (10)

**Table 31 — Sweetpotatoes: Acreage, yield per acre, and production annual 1980, 1981, and indicated 1982, selected areas and United States**

Area	Acreage			Yield per acre			Production		
	Harvested		For harvest 1982	1980	1981	Indicated 1982	1980	1981	Indicated 1982
	1980	1981							
	1,000 acres			Cwt			1,000 cwt		
North Carolina	37.0	39.0	41.0	115	120	140	4,255	4,680	5,740
Louisiana	25.0	26.0	27.0	85	100	105	2,125	2,600	2,835
California	8.4	8.9	9.2	180	185	190	1,512	1,647	1,748
Other	31.8	35.4	37.1	96	108	115	3,061	3,825	4,256
United States	102.2	109.3	114.3	107	117	128	10,953	12,752	14,579

SOURCE: Crop Production, SRS, USDA.

**Table 32—Supply and disappearance of  
canned sweetpotatoes**

Season	Carryover	Pack	Supply	Disappearance
<i>Million cases 24/303's</i>				
1975/76	4.6	7.7	12.3	9.6
1976/77	2.7	8.0	10.7	9.2
1977/78	1.5	7.2	8.7	8.0
1978/79	.6	9.4	10.0	7.9
1979/80	2.2	9.2	11.4	8.6
1980/81	2.7	5.9	8.6	8.0
1981/82	.6	8.0	8.6	6.9
1982/83 <sup>1</sup>	1.6	18.5-9.5	110.1-11.1	

<sup>1</sup>Unofficial ERS estimate.

SOURCE: National Food Processors Assn.

**Larger Supplies Depress Prices**

October grower prices slipped downward as it became increasingly apparent that the 1982 crop exceeded expectations. The average farm price, at \$6.23 per cwt, represented a sharp drop from the same time a year earlier. This is the lowest price since 1973.

During 1982/83, farmers will likely receive an average price between \$8 to \$11 per cwt, compared with \$13.60 a year ago. The fresh and canned markets will be abundantly stocked, so there seems no immediate relief from low prices. The canned carryover was over 2-1/2 times larger than a year ago, and disappearance during 1981/82 was the lowest in many years (table 32).

In mid-October, f.o.b. prices for 50-pound cartons of No. 1 Puerto Rico sweetpotatoes from Louisiana and North Carolina were sharply lower than a year earlier. Sometimes they were almost half of year-ago prices. Cal-

ifornia, by virtue of being the only west coast grower of sweetpotatoes, enjoyed prices double those on the east coast. However, f.o.b. prices for 40-pound cartons of California sweetpotatoes were substantially to sharply less than in 1981.

The production hike, together with a huge August 1 canned carryover—160 percent more than in 1981—ensure an adequate supply of canned sweetpotatoes. Wholesale prices of canned whole sweetpotatoes in sirup (24/303's) remained steady at \$12.50 a case, up \$1.50 from 1981. However, wholesale prices could decline, given the larger crop and a possible increase in the pack. Meanwhile, USDA has purchased about 540,000 cases (foodservice size) of canned sweetpotatoes, a substantial portion of this year's likely pack. The purchases will be distributed through domestic feeding programs.

**Disposition of the 1981 Crop**

The disposition of the 1981 harvest remained relatively unchanged from 1980. Ten percent of all production was allocated to seed in both years, and another 10 percent was used on the farm for seed, feed, and household use. For both years, 90 percent of the total crop was sold. It is likely that the 1982 disposition will follow the same general pattern.

**MUSHROOMS****Grower Prices Up on Overall Basis**

Grower prices for mushrooms advanced modestly for the second consecutive year. For 1981/82, mushroom prices averaged 81 cents a pound, compared with 79.8 in

**Table 33—Sweetpotatoes: F.o.b. shipping point and wholesale prices  
(wholesale lots) at New York and Chicago, indicated periods 1981 and 1982**

Market and commodity	State or origin	Unit	Week ended			
			1981		1982	
			Sept. 5	Oct. 3	Sept.10	Oct. 1
<i>Dollars</i>						
F.o.b. shipping points						
Porto Rico type, uncured	Eastern North Carolina points	U.S. No. 1 50 lb. crt.	10.25	8.38	4.75	4.38
Porto Rico type, uncured	Southern Louisiana points	50 lb. crt.	11.00	8.25	6.06	5.63
Porto Rico type, Garnet	Stockton, California	40 lb. ctn.	—	9.80	11.80	10.35
<i>Tuesday</i>						
			1981		1982	
			Sept. 8	Oct. 6	Sept. 7	Oct. 5
<i>Dollars</i>						
Terminal markets						
New York						
Porto Rico, uncured	North Carolina	50 lb. ctn.	11.00	11.00	9.50	5.50
Chicago						
Porto Rico, uncured	Louisiana	50 lb. ctn.	11.50	12.00	10.50	8.00

SOURCE: F.o.b. prices are simple averages of the range of daily prices, compiled from Market News Service reports. The market prices are representative prices for Tuesday of each week and are submitted by the Market News Service representative at each market.

**Table 34—Sweetpotatoes: U.S. annual production, per capita consumption, and season average prices, received by growers 1972-82**

Year	Production	Per capita consumption <sup>1</sup>	Grower price <sup>2</sup>
	1,000 cwt	Pounds	Dollars per cwt
1972	12.2	5.1	5.73
1973	12.2	5.1	7.32
1974	13.3	5.4	7.34
1975	12.9	5.3	8.59
1976	13.3	5.3	7.50
1977	11.9	4.8	10.50
1978	13.1	5.1	10.60
1979	13.4	5.2	8.92
1980	11.0	5.4	13.60
1981	12.8	4.7	13.60
1982	14.6		<sup>3</sup> 8-11

<sup>1</sup>Includes fresh and canned sweetpotatoes, fresh-weight equivalent.

<sup>2</sup>Season average price received by growers for crop of indicated year.

<sup>3</sup>Unofficial ERS estimate.

SOURCE: Crop Production and Agricultural Prices, SRS, USDA.

**Table 35—Mushrooms: Production, use, and value**

Season	Production	Processing use	Fresh market use	Farm value
	Million pounds			Million dollars
1973/74	279	177	102	123.4
1974/75	299	172	126	147.2
1975/76	310	168	142	191.1
1976/77	347	196	151	255.7
1977/78	399	208	191	307.6
1978/79	454	224	230	361.8
1979/80	470	214	256	368.6
1980/81	470	194	275	374.5
1981/82	517	198	319	419.1

<sup>1</sup>SOURCE: Mushrooms, SRS, USDA.

1980/81 and 78.4 in 1979/80. Fresh-market prices were largely responsible for the gain and helped offset declines in the prices of mushrooms for processing. On the average, the revised 1981/82 grower price for fresh-market mushrooms stood at 96.8 cents, up 2.1 cents from a year earlier. Meanwhile, prices of processing mushrooms fell 3 cents to 55.7 cents, the lowest since 1975/76.

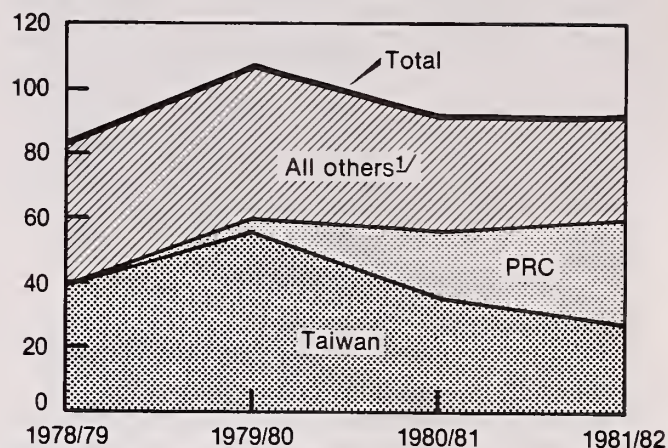
At Kennett Square, Pennsylvania, prices for fresh mushrooms were up slightly in mid-October, with growers receiving from 62 to 72 cents a pound. Most fresh mushrooms were selling at 70 to 72 cents a pound. These prices, however, are similar to those a year earlier, with only slight variations.

Prices for processed mushrooms have not done as well. In mid-October, growers were receiving from 46 to 58 cents a pound for clean-cut No. 1 mushrooms in bulk for processing, with the average price around 48 to 50 cents. Prices remained unchanged from the summer, but they were down substantially from a year earlier.

Retail prices for fresh mushrooms dropped substantially in August. The BLS reported that fresh mushrooms

**Canned Mushroom Imports to USA\***

Mil. lb.



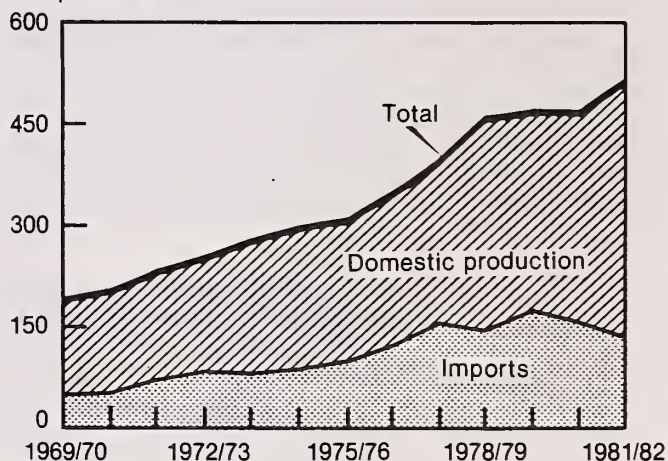
\*Product weight basis. <sup>1</sup>/ Includes South Korea, Hong Kong, etc.

USDA

Neg. ERS 2560-82 (10)

**Total Mushroom Supplies\***

Mil. pounds



\*Fresh equivalent basis.

USDA

Neg. ERS 2561-82 (10)

sold at \$1.78 a pound, compared with \$1.82 in 1981. This price drop represented a break in the trend set thus far in 1982, where prices have been consistently higher than in 1981. September prices show that the August drop was brief. The BLS wholesale price index for canned mushrooms behaved in the same manner. The September index (December 1977=100) shows wholesale prices for canned mushrooms reversing a 2-month drop, but still running substantially below a year earlier.

### Production Up for Fresh and Processed

Since 1966, domestic mushroom production has consistently risen. In 1982, total production, a record 517 million pounds, climbed 10 percent from the previous season (table 35). Fresh-market production was up 16 percent, but the output of processing mushrooms remained relatively stable. The Eastern States continue to produce the greatest portion, with 69 percent of all

**Table 36—Mushrooms: Per capita consumption**

Year	Fresh	Processed <sup>1</sup>	Processed <sup>2</sup>	Total <sup>1, 3</sup>
Pounds				
1965/66	.2	.5	.3	.6
1970/71	.3	.9	.6	1.3
1977/78	.9	1.6	1.0	2.5
1978/79	1.0	1.6	1.0	2.7
1979/80	1.2	1.6	1.1	2.9
1980/81	1.2	1.6	1.0	2.8
1981/82	1.4	1.4	.9	2.8

<sup>1</sup>Fresh-weight equivalent. <sup>2</sup>Product weight. <sup>3</sup>Totals may not add due to rounding.

mushroom sales, followed by the Western and Central States, with 24 and 12 percent, respectively.

In 1981/82, growers used around 141 million square feet of bed and tray area, a slight increase from 1980/81. However, yields rose substantially, averaging 3.66 pounds per square foot. The upward trend in bed and tray area and yield continues the pattern followed by the mushroom industry starting in the mid-1960's, when these estimates were first published. Projections for 1982/83 point to more of the same, with bed and tray area inching up imperceptibly. Based on recent trends in production per square foot, mushroom output during 1982/83 may total 540 to 570 million pounds.

Despite the increased outturn, per capita consumption of all mushrooms has held steady at 2.8 pounds (fresh-weight equivalent) (table 36). Fresh consumption, though, increased from 1.2 pounds in 1980/81 to 1.4 pounds in 1981/82. The per capita consumption of canned mushrooms fell, from 1.6 to 1.4 pounds.

### ITC Decision Deadlocked

The International Trade Commission (ITC) registered a split verdict on the issue of market disruption in the mushroom industry. Out of a panel of four commissioners, two found that processed imports from the People's Republic of China (PRC) did not seriously affect the domestic canned mushroom industry and that quantitative restrictions should not be imposed. The other two commissioners found that market disruption did exist.

**Table 37—Processed mushroom supplies<sup>1</sup>**

Year	U.S. pack <sup>2</sup>	Imports	Total	Imports as percent of total
1,000 pounds				
1965/66	48,524	13,658	62,182	22
1970/71	58,269	28,097	124,678	23
1977/78	134,995	89,753	224,748	40
1978/79	145,949	83,689	229,638	36
1979/80	139,287	105,724	245,011	43
1980/81	126,479	91,100	217,579	42
1981/82	128,748	76,574	205,322	37

<sup>1</sup>Product weight. <sup>2</sup>Processing mushroom production reported by SRS, USDA, converted to product weight by dividing by 1.538.

The American Mushroom Institute (AMI) has decided not to file another petition at this time.

Imports from the PRC have risen sharply during the last several years, as China assumed the role of the world's leading mushroom producer. However, imports into the United States from all sources have declined somewhat during the past two seasons (the time during which the U.S. import duty on canned mushrooms was raised) (table 37). Domestic production and prices have also risen, and the market share of U.S. mushroom imports has fallen slightly.

## DRY BEANS

### Production Down This Year

The 1982 dry bean crop is forecast at 25.6 million cwt, a 20-percent decline from 1981, but still the third largest crop on record (table 38). Farmers cut back harvested area 17 percent from a year earlier because of discontinued Mexican contracts. Average yields, at 1,394 pounds an acre, were down 4 percent. Rain and frost have created fungus and discoloration problems, especially in Colorado, Minnesota, and North Dakota. Throughout October, the harvest was late in most producing areas.

With the exception of California and Michigan, most bean-producing States will have reduced outturns this

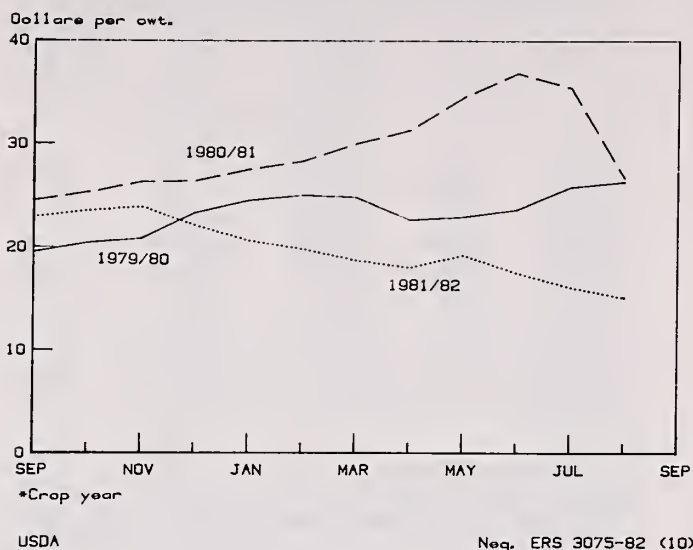
**Table 38—Dry edible beans: Acreage, yield per acre, and production, annual 1980, 1981, and indicated 1982**

Area	Acreage			Yield per acre			Production <sup>1, 2</sup>		
	Harvested		For harvest	1980	1981	1982	1980	1981	1982
	1980	1981							
	1,000 acres			Pounds			1,000 cwt		
California	213	221	250	1,790	1,820	1,788	3,813	4,022	4,469
Colorado	185	190	170	1,160	1,450	1,100	2,146	2,755	1,870
Idaho	179	243	141	1,860	1,760	1,820	3,329	4,277	2,566
Michigan	570	590	540	1,360	1,220	1,350	7,752	7,198	7,290
Nebraska	150	220	205	1,820	1,750	1,600	2,730	3,850	3,280
North Dakota	255	415	295	1,050	1,100	950	2,678	4,565	2,803
Other <sup>3</sup>	269	322	235	1,467	1,598	1,414	3,947	5,147	3,324
United States	1,821	2,201	1,836	1,449	1,445	1,394	26,395	31,814	25,602

<sup>1</sup>Excludes beans grown for garden seed. <sup>2</sup>Cleaned basis. <sup>3</sup>Includes Kansas, Minnesota, Montana, New York, Utah, Washington, and Wyoming.

SOURCE: Crop Production, SRS, USDA.

## Dry Beans: U.S. Grower Prices\*



**Table 39—Dry edible beans: U.S. annual production, exports, per capita consumption, and season average price received by growers, 1972-82**

Year	Production	Exports <sup>1</sup>	Per capita consumption	Grower price <sup>2</sup>
	Million pounds	Pounds	Pounds	Dollars per cwt
1972	1,798	345	5.56	11.00
1973	1,627	484	7.00	27.30
1974	2,033	436	4.99	19.80
1975	1,744	427	6.56	20.10
1976	1,779	353	6.22	15.50
1977	1,661	424	6.24	20.20
1978	1,894	593	4.76	17.30
1979	2,048	967	4.38	22.80
1980	2,640	1,353	4.27	28.00
1981	3,181	1,789	4.06	21.60
1982	2,560	<sup>3</sup> 1,300		<sup>3</sup> 13.00-18.00

<sup>1</sup>Includes dry-weight equivalent of canned beans. <sup>2</sup>Season average price received by growers for crop of indicated year. <sup>3</sup>Unofficial ERS estimate.

year. California's production is expected to increase 10 percent. In Michigan, production is forecast to be up 1 percent. Other States, such as Colorado, Idaho, Nebraska, and North Dakota, anticipate downturns between 10 and 40 percent from a year ago. All the major States growing pinto beans are exhibiting acreage declines, but it is hard to determine whether total acreage and production decreases are solely attributable to the decline for this particular bean.

### Bean Prices Low

The market is undergoing an adjustment period as the new crop comes on the scene. Prices reflected light demand for an abundant supply of beans. October prices were the lowest since 1974. Grower prices in October, at \$13.40 per cwt, showed a sharp dip from 1981 and reflect market uncertainty over Mexican sales. Indeed, f.o.b. prices for pinto and black turtle beans (the mainstays of Mexican sales) are especially hard hit. Pinto bean prices (dealer) were running between \$14 and \$15.50 per cwt on October 20, compared with \$21 to \$24 in 1981. New-crop prices for Michigan pea beans are also decidedly lackluster. F.o.b. prices were around \$14.50 per cwt, less than half those of the previous year's. Great Northern prices are down sharply from 1981. Pinks and small reds out of Idaho and Washington are faring somewhat better than the rest, but f.o.b. prices for both are trailing behind a year ago.

The California varieties, despite a better showing, also are down from a year ago. F.o.b. prices for large limas during the latter half of October were selling between \$31.50 and \$32.50 per cwt, compared with \$40.50 and \$41.50 a year earlier. Baby limas were quoted at \$22.50 to \$23 per cwt, also down sharply from 1981. In addition, the 1982 f.o.b. prices for blackeyes and light red kidneys have dropped sharply from 1981.

### Outlook

Despite sharply lower prices, it is doubtful that domestic demand will strengthen to the extent needed to firm

up prices, as it is relatively inelastic. Exports constitute the largest portion of bean sales, and there the situation presently is sluggish. Argentina expects a good crop of beans and will likely not be importing any great quantities. The Brazilian Government has authorized exports of black and colored beans because of its good harvest and ample stocks.

Mexico, which took more than a fourth of the 1980 and 1981 crops, currently is quiet because of adequate stocks of beans and reduced purchasing power resulting from its February 1982 devaluation of the peso. The bean crop there has been damaged by bad weather. Nevertheless, sources in Mexico expect to see purchases of only 50,000 metric tons during the upcoming year, vastly below the 400,000 tons bought the previous 2 years. However, given Mexico's inability to meet its self-sufficiency goals and its probable depletion of existing stocks, it is likely that this downturn in bean purchases will not be a permanent phenomena.

Canadian white pea beans appear in good supply. The total U.S. and Canadian crop is estimated at 9.1 million bags, a 10-percent increase from the 1973 record. Canadian area for harvest is unchanged from 1981, but good yields expanded production to 1.6 million cwt. Therefore, Canada will have a good offering of beans for sale.

Given existing conditions, it is likely that bean prices will continue to lag appreciably behind the peaks of the previous 2 years.

## DRY PEAS AND LENTILS

### Industry Estimates Indicate Production Up

Because of budget constraints, the Crop Reporting Board discontinued its estimates of dry pea and lentil production. However, industry data can be substituted (table 40).

Crop estimates for five major categories of dry peas and lentils (regular green peas, small sieve green peas, yellow peas, Austrian winter peas, and lentils) show a general upward trend. Regular green and small sieve

**Table 40—Dry peas and lentils: Average, yield, and production, 1980-82**

Class	Acreage			Yield per acre			Production		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
	<i>1,000 acres</i>			<i>Pounds</i>			<i>1,000 cwt</i>		
Green peas	116.4	80.7	170.0	2,342	2,146	1,529	272,582	173,228	259,959
Yellow peas	19.4	34.4	38.1	2,233	1,889	1,529	43,316	64,972	58,252
Lentils	237.7	193.0	183.0	947	1,023	856	215,650	197,416	156,723
Australian winter peas	28.9	10.4	29.1	862	1,425	1,326	24,949	14,820	38,629
Total	392.4	318.5	420.2	1,411	1,414	1,222	553,494	450,436	513,563

SOURCE: American Dry Pea and Lentil Association

green peas registered sharp gains compared with 1981 production. In 1982, the regular green pea outturn, at 214 million pounds, was sharply larger than both the 1981 crop and the 10-year average. Small sieve greens totaled 46 million pounds, up 30 percent from 1981. Yellow peas and lentils, on the other hand, exhibited notable downturns from a year ago, although their 1982 production was sharply above the 10-year average. Production of Austrian winter peas made a spectacular comeback, after dwindling for several years. The 1982 crop was 160 percent greater than in 1981 and was well above the 10-year average.

The average grower price for all peas (excluding Austrian winter and wrinkled seed peas) stood at \$8.60 per cwt in September, compared with \$8.86 in 1981.

#### Exports Continue Downward, Domestic Shipments Up

Total dried pea exports for 1981/82 dropped 2 million pounds from a year earlier. In addition, exports for

August 1982 were down sharply from a year earlier. Nevertheless, demand from South America and India helped firm up green pea sales, and the Orient expressed interest in Austrian winter peas. Lentil exports started 1982/83 hesitantly, but previous commitments should help push up sales.

Domestic shipments of peas and lentils at the onset of the current season looked good. Pea shipments for August 1982 were estimated at 5 million pounds, sharply above a year earlier. Lentil movement was up imperceptibly, but interest currently looks good.

#### Outlook

Increased production of green peas, lentils, and Austrian winter peas will likely put downward pressure on prices. However, continued interest in domestic sales could ease the situation. Growers are tightly holding on to supplies in hopes of improved prices later this season.

# THE PESO DEVALUATION AND FLORIDA-MEXICO COMPETITION IN WINTER FRESH VEGETABLES

by

Glenn Zepp\*

**ABSTRACT:** Devaluation of the Mexican peso provides Mexico's growers of winter fresh vegetables with a competitive advantage over Florida growers. However, accelerated inflation and rapidly rising production costs in Mexico will result in an only short-lived advantage—probably only 1 or 2 years. In the longer term, devaluation is only one of several factors that affect the competitive status of Florida and Mexico. During any given year, the weather in Florida and Mexico appears to be most important factor in determining each market share. In any case, both Florida and Mexico will continue to supply substantial shares of the U.S. market for winter fresh vegetables.

**KEYWORDS:** Winter fresh vegetables, peso devaluation, Florida, Mexico, competition.

## Introduction

Florida and Mexico are the principal suppliers of winter fresh vegetables to the U.S. market, providing almost all the fresh cucumbers, eggplant, peppers, squash, snap beans, and tomatoes from December through May and a large share of the November and June production. Tomatoes constitute the largest volume, accounting for roughly half the total imports of the six vegetables. As recently as the 1977/78 season, Florida and Mexico had nearly equal shipments of both tomatoes and the total for all six vegetables. In the following years, however, Florida apparently strengthened its competitive standing relative to Mexico, as each season's shipments expanded over the previous one, while imports from Mexico declined almost continuously from one season to the next.

Several factors play important roles in determining the competitive strengths (as measured by shipments) of Florida and Mexico in fresh vegetable production. The exchange rate between the Mexican peso and the U.S. dollar is one of these factors.

Mexico permitted devaluation of its monetary unit, the peso, during February and August of 1982. The purpose of this article is to assess the likely effect of the peso devaluations on the amount of winter fresh vegetables Mexican growers will ship to the United States during 1982/83, and on the longer term competitive position of Florida and Mexico in winter fresh vegetable production.

## Trends in Shipments and Imports

Winter fresh vegetable shipments from Florida followed a pronounced upward trend from 1972 to 1981, while imports from Mexico trended downward (figures 1 and 2).<sup>1</sup> In both areas, tomato shipments accounted for about half the volume and determined the direction of change in total supplies for the six vegetables. Tomato shipments from Florida doubled from 5.243 million cwt in 1972/73 to 10.562 million during 1981/82. Reported Florida shipments of the five other vegetables increased by 2.198 million cwt during the 10-year period. Part of this increase resulted from the reporting of squash and eggplant data starting in 1976/77.

A reversal in the downward trend in Mexican tomato imports occurred in the mid-1970's, as imports expanded for 2 years following the 1974/75 season. The expansion was particularly dramatic between 1975/76 and 1976/77, when tomato imports increased by 27 percent and the total for six vegetables rose 37 percent.

Two events during 1976/77—one economic and one climatic—favored Mexican growers over Florida growers and probably caused the reversal. The economic event was the devaluation of the Mexican peso during August 1976. This gave the Mexican growers a price advantage over Florida producers in the U.S. market. The climatic event favoring Mexican growers was a disastrous freeze that struck Florida in January 1977, destroying nearly all tender vegetables in the State. Mexican growers were the sole suppliers to the U.S. market for nearly 3 months following the freeze. They received record-high prices for their exports, which, because of the devaluation, were even higher in peso terms.

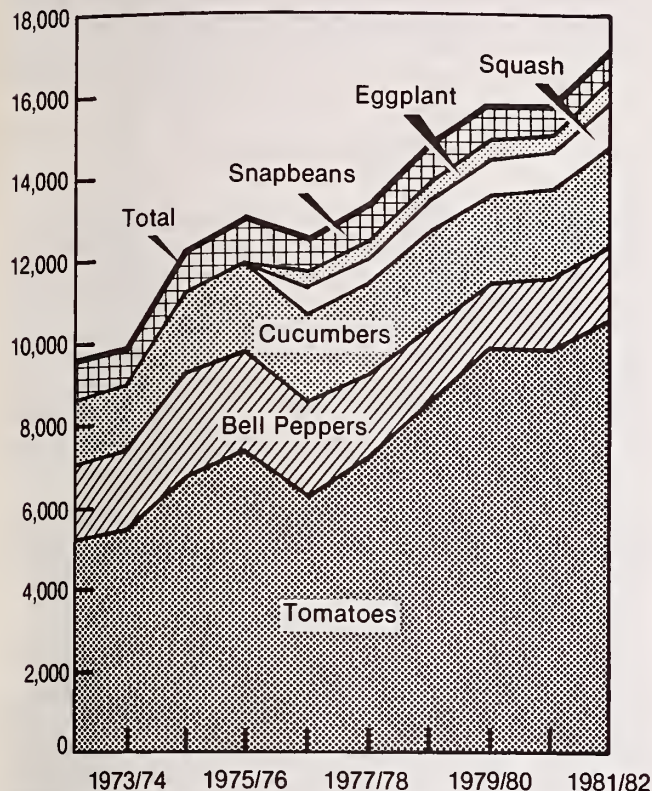
In the seasons following 1976/77, inflation in input prices in Mexico raised production costs and offset much of the advantage that Mexican growers had from the devaluation. In addition, Mexican growers suffered several years of adverse weather that reduced tomato production and further lowered profits. Therefore,

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<sup>1</sup>Shipment data reported here represent the totals for the crop year. In both Florida and Mexico most shipments for a given season occur between October 1 and July 1.

## Shipments of Six Winter Fresh Vegetables from Florida, 1972/73 through 1981/82

Thous. CWT.



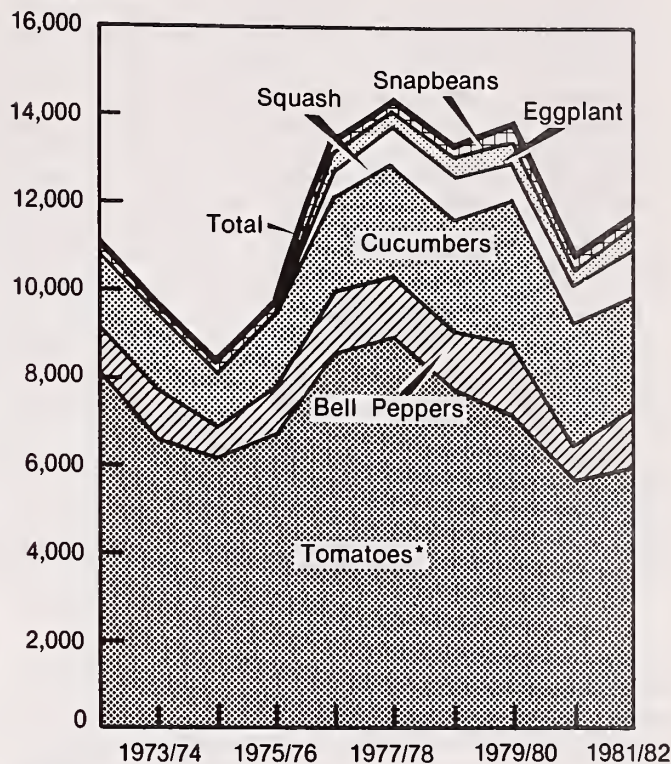
Source: USDA, AMS fresh fruit and vegetables, weekly unloads shipments.

USDA

Neg. ERS 350-82 (10)

## Imports of Six Winter Fresh Vegetables from Mexico

Thous. CWT



\*Including cherry tomatoes.

Source: USDA, AMS Fruit & Vegetable Division. Fresh Fruit and Vegetables Ornamental Crops Weekly Summary. Shipments and Unloads.

USDA

Neg. ERS 349-82 (10)

imports of fresh tomatoes from Mexico resumed their downward trend that prevailed prior to the devaluation. Only during 1981/82 did the trend reverse itself again, and imports from Mexico increased 8 percent from the previous season. Another devaluation of the peso occurred in the middle of the 1981/82 marketing period, again providing Mexican growers with a price advantage and perhaps accounting for some of the expanded vegetable imports that season.

## Peso Devaluation

Before 1976, the peso/dollar exchange rate was fixed at 12.5 pesos to the dollar (table 1). During August of that year, the value of the peso was permitted to fall, and the exchange rate almost immediately rose to about 19 pesos to the dollar. The rate of exchange stabilized between 22 and 24 pesos to the dollar during 1977-81. In February 1982, another major devaluation was permitted, and the value of the peso fell to 45 pesos to the dollar by the end of March. During August 1982, a further devaluation pushed the value of the peso down even more. At the end of September, an official exchange of 70 pesos to the dollar prevailed, but higher rates were reportedly available through unofficial markets.

Devaluations of the peso tend to improve Mexican growers' competitive position relative to that of Florida producers, at least for a year or two. They raise the price (in pesos) Mexican growers receive relative to costs

and make vegetable production for export more profitable than it would be otherwise. For example, when the exchange rate was 24.1 during 1981, a Mexican grower could convert each dollar received from export vegetable sales into 24 pesos for use in paying production costs, such as wages and other expenses. When the rate of exchange is 70 pesos per dollar, the grower can convert each dollar to 70 pesos, providing an additional 46 pesos with which to pay production expenses or to enhance net returns.

The advantage a devaluation provides to Mexican vegetable growers depends, in part, on the extent to which the supplies they use in vegetable production are produced in Mexico and are paid for with pesos. As an example, the wages paid to vegetable workers do not necessarily change at the time of devaluation. Hence, immediately following a devaluation, a dollar earned from export sales will purchase more hours of labor than it would before. On the other hand, those production supplies that Mexican growers purchase from the United States must be paid for in dollars and are not cheaper relative to receipts from export sales.

Rising production costs in Mexico tend to eventually offset the Mexican growers' price advantage. Devaluation of a country's money usually is associated with a period of high inflation rates. Although devaluation raises the peso value of export earnings, growers soon need more pesos to pay the higher production costs accompanying inflation. Prices have been rising at a very rapid rate in Mexico in recent years. From 1979-81,

**Table 1 — Mexico: Selected economic data, 1970 to 1982**

Year	Foreign exchange Peso/dollar <sup>1</sup>	Labor cost per day <sup>2</sup>		Wholesale price index <sup>1</sup>
		Peso	Dollars	
1970	12.5	30.50	2.44	59.9
1971	12.5	30.50	2.44	61.9
1972	12.5	36.00	2.88	63.9
1973	12.5	36.00	2.88	73.9
1974	12.5	47.90	3.83	90.5
1975	12.5	58.45	4.68	100.0
1976	15.4	70.00	<sup>3</sup> 5.60	122.3
1977	22.6	94.73	4.19	172.6
1978	22.8	109.67	4.81	199.8
1979	22.5	129.50	5.76	236.4
1980	22.9	157.50	6.88	294.3
1981	24.5	198.33	8.06	367.0
1982 <sup>4</sup>	NA	NA	NA	NA

NA = Not available.

<sup>1</sup>International Monetary Fund. International Financial Statistics, various issues. <sup>2</sup>Confederacion de Asociaciones Agricolas del Estado de Sinaloa. <sup>3</sup>Estimated at 12.5:1 exchange rate. During August, the value of the peso was permitted to fall, hence the average exchange rate for the year was 15.4:1. <sup>4</sup>The peso/dollar exchange was 45:1 on March 30, 1982. On September 30, 1982, the official exchange rate was pegged at 70:1, but higher rates reportedly were available through unofficial markets.

the wholesale price index in Mexico rose at a 24-percent annual rate.

In net, a peso devaluation provides higher-than-normal profits to Mexican vegetable growers for a year or two. But eventually the higher costs of supplies purchased from the United States and rapidly rising production costs in Mexico, due to inflation, offset the price advantage bestowed by devaluation.

### Outlook for 1982/83

The devaluation of the peso has created a situation in which Mexican winter vegetable growers can potentially reap higher-than-normal returns from exports to the United States. If weather in Mexico is favorable this season, and if market conditions in the United States cover the costs for picking, packing, and marketing, Mexican growers probably will export more winter fresh vegetables to the U.S. market than they otherwise would have shipped, and more than they shipped during the past two seasons. If more winter vegetables actually are imported, U.S. grower prices will be lower than they would have been in the absence of a devaluation.

The most important qualifier in the above outlook pertains to weather. Adverse growing conditions in Mexico, such as too much cold weather, rain and wind storms, or severe drought can reduce production substantially, and the expected large volume of vegetables of adequate quality for export to the United States may not be available. In the same way, Florida can experience bad growing weather—particularly hard freezes that destroy tender vegetable crops—which reduces production and marketings below planned levels.

Market conditions also can affect the amount of vegetables imported from Mexico. Recession in the United States can reduce consumer purchases of tomatoes, which tends to depress prices. In addition, low grower prices occur when unusually large volumes of vegetables (both U.S. shipments and Mexican imports) are being

marketed. For whatever reasons, if low prices occur during the midwinter, when Mexico normally ships its largest volumes, the amount of vegetables imported may be lower than they otherwise would be. However, a “low” U.S. dollar price may still represent a “high” peso price to Mexican growers, given the present exchange rate, and therefore will be less of a restraint on imports than it would have been prior to devaluation.

Because of the severe limits the Mexican Government has placed on the exchange of pesos for dollars, some producers may face difficulty in obtaining dollars to use in purchasing U.S. production supplies. The extent to which this difficulty occurs can hamper production in Mexico.

Mexican growers, anticipating higher profits from exports, may expand their vegetable production to further benefit from the higher peso-value returns. Following the peso devaluation of August 1976, for example, Mexican growers expanded the area planted to export tomatoes by about 20 percent from the previous season. Although the area planted to other vegetables did not increase accordingly, U.S. imports of tomatoes, peppers, cucumbers, and snap beans increased by 27, 48, 55, and 45 percent, respectively.<sup>2</sup> The 1977 freeze in Florida resulted in unusually high prices for winter vegetables and provided an added incentive for Mexican growers to export to the United States. The combination of the devalued peso and higher U.S. market prices provided Mexican vegetable growers with an extremely profitable 1976/77 season.

Mexican vegetable growers also expanded their exports during 1977/78, perhaps because of a continuing favorable exchange rate and partially because of their strong financial position following the 1976/77 season that permitted financing of additional production. However, Florida growers had relatively favorable growing condi-

<sup>2</sup>Comparable import data for eggplant and squash were not available for previous years with which to compare the 1976/77 volumes.

tions during 1977/78. Consequently, they also marketed large volumes of vegetables. Market prices were very low, and growers from both Florida and Mexico lost money. During subsequent seasons, the advantage of the devaluation apparently disappeared, and Mexico's vegetable exports to the United States trended downward, while Florida's shipments rose.

## Long-Term Outlook

Over the longer term, Florida and Mexico probably will maintain relatively even shares of the U.S. market, with Florida perhaps expanding its share slightly from that held during the 1970's. Devaluation of the peso represents only one of several factors determining the competitive position of Florida and Mexico in supplying winter vegetables to the U.S. market. In addition to the peso/dollar exchange rate, the outcome of future competition between Florida and Mexico depends on costs of production, average grower prices, tariffs, and the weather.

### Costs of Production

Trends in production costs appear to be favoring Florida producers. Lower costs tend to improve an area's competitive status. Although Mexico traditionally has been cited as having low agricultural wages compared with Florida, labor costs there are an important part of total production costs. During the 1970's, Florida adopted new production technology, especially the use of full-bed plastic mulch, which increased yields faster and held down per unit production costs. This gave Florida an advantage over Mexico. Moreover, since 1978/79, input prices in Mexico have been rising faster than in Florida, and the recent devaluations will likely accelerate the rate of increase. Continuation of the present trend in Mexican input-price inflation carries major importance in determining relative costs of production and the competitive position of Florida and Mexican producers. If costs continue to rise more rapidly in Mexico than in Florida, relative costs will weigh in favor of Florida. Future adoption of cost-reducing technology will also count heavily. However, rising labor costs in Mexico may cause growers there to move toward the production of more mature green tomatoes, which could have a cost-reducing impact and be to Mexico's advantage.<sup>3</sup>

### Grower Prices

An area's competitive position is determined as much by the average price received for its product as by the costs of production. If because of higher quality or an advantage in timing of its marketings, either Mexico or Florida receive a higher average price, that area's competitive edge will be enhanced.

### Peso/dollar Exchange

We probably have not seen the last of the peso devaluations. The magnitude and timing of any future

devaluations will be a matter of Mexico's policies on the peso value and inflation.

In recent years, the Government has supported the value of the peso at artificially high levels in the face of rapid inflation in that country relative to the United States. The production of vegetables for export tended to be relatively unprofitable during periods when the peso was supported at artificially high levels. Eventually, the Government's costs of supporting the peso's value became too great. When the Government withdrew its support, devaluation was quick and massive. Suddenly Mexican producers of export vegetables found themselves reaping large profits under the new exchange rates. But, as the Mexican Government again supported the value of the peso at a new level, rising prices in Mexico eroded growers' profit advantage until a new devaluation occurred.

An alternative scenario might be one in which the Mexican Government permitted the peso to continually seek a market-determined exchange rate with the U.S. dollar. In such a situation, numerous small changes in the value of the peso would occur, and the artificially created high-profit and low-profit periods for Mexican producers would be eliminated.

### Tariffs

Increases in the average price per pound for vegetables imported from Mexico has diminished the importance of the import duty in protecting the Florida industry. Tomatoes coming into the United States from Mexico are assessed a duty of 1.5 or 2.1 cents a pound, depending on the month of entry. This schedule has remained unchanged for a number of years. Examining the *ad valorem* equivalent (percentage of the value of tomatoes represented by the duty) provides a means of assessing the importance of the duty. During recent years, prices for export tomatoes have risen, and the *ad valorem* equivalent of the tomato duty has declined from a high of 17 percent of the value of tomatoes in 1974 to 4.2 percent during 1981 (table 2).

### Weather

Weather can be the most important factor in determining the outcome of Florida-Mexico competition within a given season. Freezes that destroy the Florida crop and boost prices for vegetable imports usually occur at a time when Mexican producers have their largest volume of shipments, and this is a factor that helps Mexico maintain as large a share of the U.S. market as it does. Typi-

**Table 2—Ad valorem equivalent duty on imported fresh tomatoes, selected calendar years**

Year	Duty as a percentage of value of imports
1969	12.1
1973	12.2
1974	17.0
1976	16.4
1977	9.9
1978	9.5
1979	8.5
1980	9.3
1981	4.2

Source: ERS, USDA, *Foreign Agricultural Trade of the United States*, various issues dated June 1970, May 1974, June 1974, and August 1977, and unpublished Department of Commerce data.

<sup>3</sup>Currently, Florida harvests most of its tomatoes as "mature green." Mexico's growers harvest most of their export tomatoes after they have started to develop some pink color, which is referred to in the industry as "vine ripe." Harvesting tomatoes as vine ripens requires more frequent picking than harvesting as mature greens and therefore uses more labor per box of tomatoes.

cally, Mexico has expanded its volume of shipments during seasons in which Florida experiences killing freezes and during the subsequent year.

On the other hand, Florida doesn't have a monopoly on adverse growing conditions. Mexico also has seasons with cold temperatures, storms, and droughts, which result in crop losses and reduced yields.

In summary, Florida seems to be in a strong competitive position in supplying winter fresh vegetables. However, competition between Florida and Mexico is a dynamic phenomenon. Economic, technological, and weather conditions change from time to time, creating

new forces that effect the competitive status of the two areas. Such forces as rapidly rising input prices in Mexico weigh in favor of Florida growers. Other factors, such as the devaluation of the peso and the declining *ad valorem* equivalent of the import duty, work in favor of Mexican producers. In addition, Florida has a transportation advantage in the eastern U.S. markets, while Mexico has an advantage in shipping to western markets. When all the advantages of each area are evaluated, it appears that both Florida and Mexico will continue to supply substantial shares of the U.S. market.

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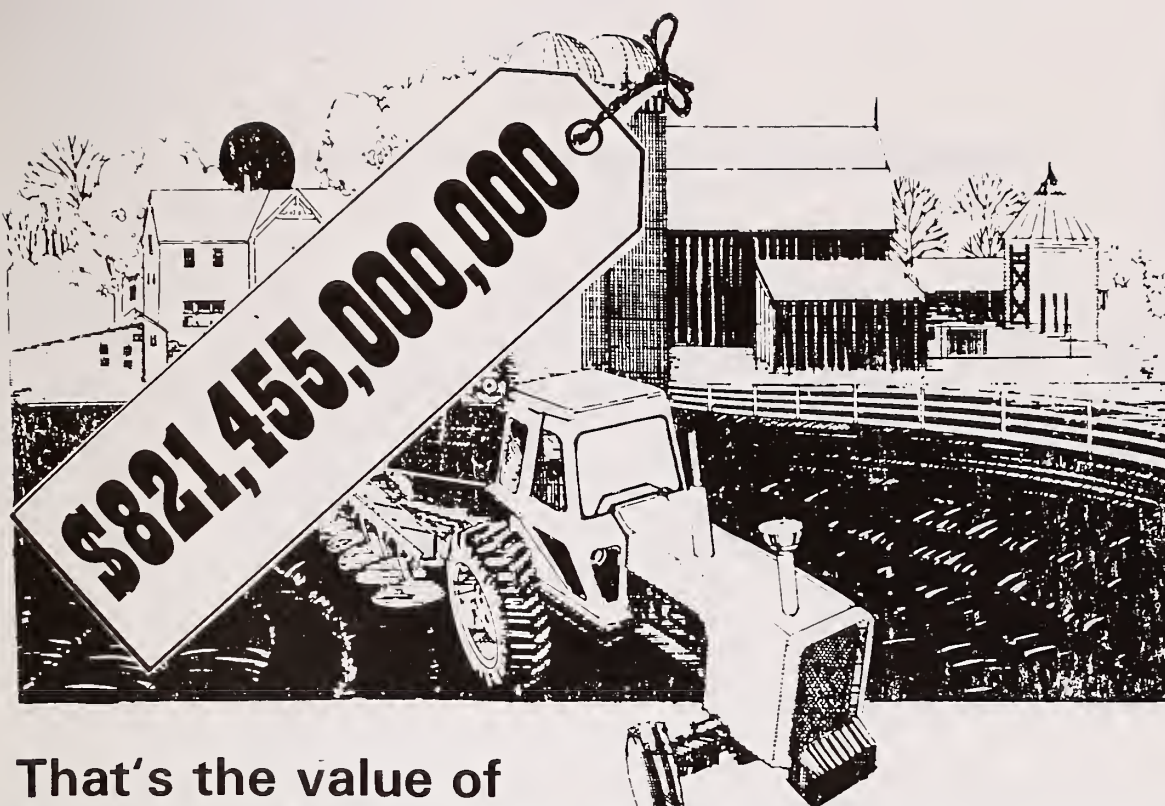
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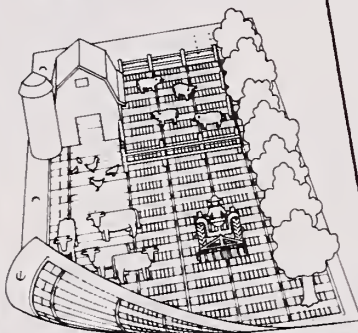


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